



Shaping Tomorrow's  
Built Environment Today

Northern Nevada Chapter 126  
February 2012 Newsletter

**President Message:**  
**Chris Little**

No real update this month. Thank you to all who attended the last meeting. Keep those donations and team enrollments for the gun shoot coming in! See you next month!  
-Chris Little

**President Elect / Programs Chair:**  
**Bryan Tilton**

**March 2012 Meeting ~ Thursday March 15th, 2012**

The meeting will be held at the Claim Jumper Restaurant  
Cocktails at 5:30, Dinner at 6:00

**Claim Jumper Restaurant**  
**4905 S. Virginia St. Reno, NV 89502**  
**(775) 829-0200**

**Speaker:**

**Brandon Wallace – BRD Noise & Vibration Control, Inc.**

**Bio:**

Brandon Wallace, Southwest Regional Sales Manager of BRD Noise & Vibration Control, Inc. is a graduate of Kansas State University with a BS in Chemical Engineering. Upon graduation, he completed a 6 month intensive HVAC Graduate Training Program and then went on to work for the Trane Company in their air and water cooled chiller division where he held several positions over the next 7 years. In 2006 he joined BRD Noise and Vibration Control, Inc. as their Southwest Regional Sales Manager responsible for design and sales. Brandon has worked extensively with engineers and manufacturers designing and manufacturing long-term engineered noise control solutions for the HVAC, Industrial, Architectural, and Environmental markets. BRD is a frequent presenter at ASHRAE Chapter meetings and has presented many seminars on the design and application of acoustics and noise control measures for numerous industry groups.

**Topic Summary:**

The presentation goal is to leave with an understanding of acoustical terminology used in the HVAC market, gain knowledge of solutions for various types of HVAC equipment, and understand when and where they can be applied.

Intro to Acoustics (learn basic terminology and how it should be applied)

- dB vs dBA
- Sound Power vs Sound Pressure
- NC, tone, relative loudness, etc.....

Best Practices (learn best practices, typical attenuation levels for various treatments and general rules of thumb)

- Chiller Noise Treatments
- Rooftop Unit Noise Treatment
- Vibration Isolation
- Roof Mounted Equipment
- Ductwork and Silencers

I look forward to seeing you all at Claim Jumper for dinner!

**Research & Promotions Chair:**  
**Sandor Duran**

ASHRAE Members-

As we continue our 2011/2012 campaign and need your help to do our Chapters part to help further research in our industry. We have a Chapter goal of \$5,000 to be donated for the 2011-2012 Research Promotions Campaign. I'd like to thank those that have contributed in the past, but we will need everyone's help to reach our goal for this year. Please start thinking about what you can do as an individual to help our chapter do its part to support the research projects that help keep our industry moving forward by improving the technology that shapes the systems that we are all involved with.

Please at a minimum take some time request that your company support our chapter with a donation to the ASHRAE RP Campaign! To make a contribution online please visit the following website:

<https://xp20.ashrae.org/secure/researchpromotion/rp.html>

Please send any donations or checks to my office for collection and processing, or bring the checks to a meeting and give it to me there! You will receive receipt that can be used for tax-deduction purposes.

ASHRAE  
 C/O CR Engineering  
 5434 Longley Lane  
 Reno NV 89511  
 Sandor Duran  
 RP Chair, ASHRAE N. Nevada

I would like to thank all of you for your contributions and support of Ashrae.

**Memberships Promotions Chair:**  
**Chun Lee**

I know that between the gym, book of the month, wine of the month, ammo of the month, whiskey of the month, camo apparel of the month and other membership's fees that come up at the beginning of the year, it's really easy to forget about renewing your ASHRAE membership. I can go on and on about how imperative it is to give back to the grass root association that is the backbone of HVAC or how each and every paid membership goes a long way into research and development of standards for our industry or how the local chapter provides numerous scholarships to starving mechanical engineering students (remember many of us were those starving students) or even how your membership gets you discounts for the ASHRAE bookstore, but I won't do that. Instead I want to focus on how important your ASHRAE membership is to you. Without your ASHRAE membership you would not be able to get away from your significant other once a month to have a few drinks and get educated about our industry at our monthly meetings. There's a statistic on Wikipedia that says that people with ASHRAE membership are 25% less likely to get divorced. So renew that membership today not for starving students or your industry but for yourself!

"One thing I don't know why  
 it doesn't even matter how hard you try  
 Keep that in mind, I designed this rhyme  
 To explain in due time  
 All I know  
 time is a valuable thing  
 Watch it fly by as the pendulum swings

Watch it count down to the end of the day  
The clock ticks life away  
So unreal  
Didn't look out below  
Watch the time go right out the window  
Trying to hold on but didn't even know  
Wasted it all just to  
Watch you go"  
-Mike Shinoda

**Sustainability Chair:**  
**Mark Hauenstein**

ASHRAE has redesigned their governmental affairs web site to make it more user-friendly.

Find out more at: <http://www.ashrae.org/government-affairs/>

The Northern Nevada Chapter of LEED is holding a luncheon on March 1<sup>st</sup> at 11:30. **Address is: Gui Denby Building (LEED Gold) in the Learning Center, 855 S. Center St. Reno, NV 89501** \$10 members, and \$25 non-members.

<http://usgbcnv.org/>

Sorry, can't follow Mr. Lee's footsteps this month.

**Shoot Chair:**  
**Matt Brennan**

See attached sign up sheet for the ASHRAE Clay Shoot Competition on April 21, 2012. We have added the option of buying Mulligans this year to the shoot!

**Chapter Secretary Chair:**  
**Jason Bender / No update this month.**

**2011-2012 Northern Nevada ASHRAE BOG Meeting**  
**Meeting Notes by Brian Bassi - Secretary**  
**Feb 9<sup>th</sup>, 2012**

*Members attending: Chris Little, Matt Brennan, Chun Lee, Jason Bender, and Brian Bassi*

Meeting occurred at 12:00 p.m. at Bangkok Cuisine, Reno

- 50% of the profit generated from this year's Wine Tasting is set aside for the chapters donation to Research Promotions.
- We need Sponsors for the Shoot this year, please help us recruit them!
- We will be adding "Mulligans" this year to supplement the fundraising and enjoyment at the ASHRAE shoot. They will be \$5 per shot- maximum of 5.
- We need a volunteer to take Team pictures at the shoot this year. Please contact Matt Brennan should you be willing or know someone that is.
- Brenna Smith has offered to sell Raffle tickets again this year. We are confident that she will do a great job but if you are willing to help please volunteer!
- We are looking for a location to do this year's job walk. We are hoping to do it at the new UNR dorm and are trying to set that up. If anyone else has a suggestions please contact Bryan Tilton.

Meeting adjourned at 1:10 p.m.

**Treasurer Chair:**

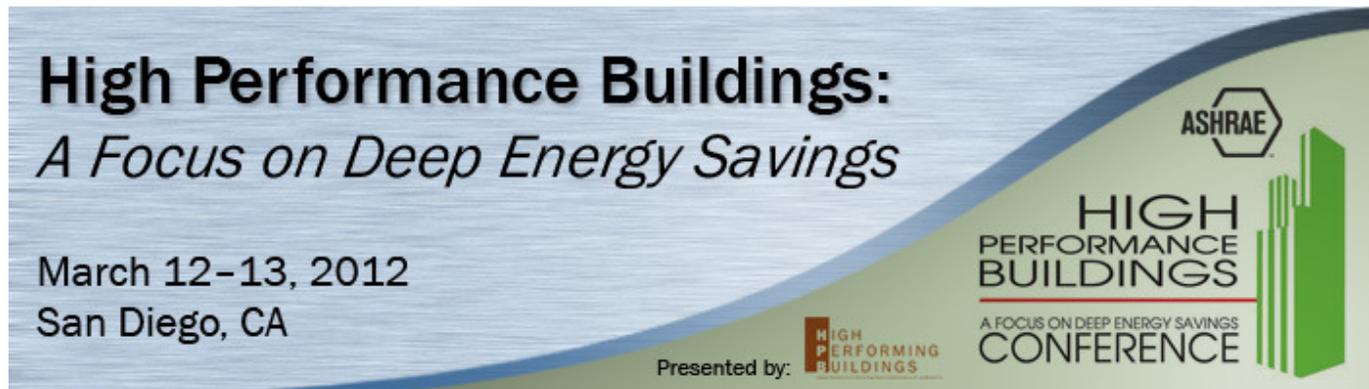
**Brian Bassi / No update this month.**

“Checking account balance is \$2,189.53 and the savings account balance is \$12,519.03”

**Newsletter Editor:**

**Sal Cervantes**

ASHRAE is hosting the upcoming conference “High Performance Buildings” March 12-13 in San Diego. The website for the conference is [www.ashrae.org/hpbconference](http://www.ashrae.org/hpbconference).



**CRC & Student Activities Chair:**

**Candice George / No update this month.**

**Mission**

*To advance the arts and sciences of heating, ventilating, air conditioning and refrigeration, to serve humanity and promote a sustainable world.*

**Vision:**

*ASHRAE will be the global leader, the foremost source of technical and educational information, and The primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.*

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For Release:  
Feb. 1, 2012

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## Best Practices to Improve Building Performance Focus of ASHRAE High Performing Building Conference

ATLANTA— The engineering, architectural and green building communities, as well as governmental agencies, are seeking to fundamentally change energy-use aspects of the built environment. The ASHRAE conference, High Performance Buildings: A Focus on Deep Energy Savings, addresses what really works when tackling major improvements in energy efficiency, renewable applications and operating practices in buildings.

The conference is sponsored by ASHRAE's High Performing Buildings magazine and takes place March 12-13, 2012 in San Diego, Calif.

"The conference's focus on case studies and networking offers attendees an up close and personal exchange of ideas on best practices for high performance buildings," Kent Peterson, conference chair, said. "It's an intense two days of examining what has and hasn't worked in the past, what we're doing right now and what we can do in the future to ensure that 'high performance' is the obvious choice when it comes to design and construction."

The full technical program offers more than 50 presentations in 16 sessions on topics such as applications results; energy audits; commissioning; benchmarking of utility consumption; economics, design and construction; energy efficient IEQ strategies and technologies; and energy efficiency strategies for envelopes and lighting.

Particular sessions of interest include "U.S. Army Net Zero Policy, Initiatives and Progress," presented on March 12, by Katherine Hammack, Assistant Secretary of the Army (installations, energy & environment). The Army is the largest facility energy user in the federal government, with an energy bill that exceeded \$1.2 billion in FY10. A recent initiative by the Army has announced 17 installations that will participate in a pilot project to achieve net zero by 2020 in one of four categories: energy, water, waste or all three.

Additionally, "Life-Cycle Commissioning: Maximizing Investment in Construction, Operation and Maintenance," on March 13, addresses the importance commissioning throughout the entire life-cycle of a building, versus new building or retro-commissioning alone. Life-cycle commissioning maximizes the capital, operating and strategic investments in facilities and a necessary evolution for an efficient building.

Jeanne Clinton, special adviser to the Governor for Energy Efficiency, presents a keynote speech on "Energy Management Meets Economic Development." Other keynote speeches are presented by ASHRAE President Ron Jarnagin and Eric Corey Freed, who will speak on "Dodo-Sapiens: How Our Way of Life Is Killing Us and the Need for Regenerative, Bio-Based Buildings." The conference also includes a presentation on this topic by Douglas Pierce.

In conjunction with the conference, ASHRAE Learning Institute is offering the Implementing Standard 189.1-2009 for High-Performance Green Buildings seminar. Presented by Tom Lawrence, a professor at the University of Georgia, this six-hour seminar focuses on the minimum requirements for the design, construction and plans for operating high-performance buildings. The seminar takes place on March 11, and the cost is \$485 (\$395 ASHRAE, USGBC and AIA members).

Cost of registration for the conference is \$650, non-member (\$550 ASHRAE, USGBC and AIA members). The conference will be approved for AIA LUs, NY PDHs and GBCI credits for LEED APs. An "on-demand" virtual conference is included with the registration fee. A Virtual Conference only registration is \$149 (\$99, member). Registration is limited to 300 attendees. To register or for more information, go to [www.ashrae.org/HPBConference](http://www.ashrae.org/HPBConference).

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.

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For Release:  
Feb. 7, 2012

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Focus on Large Building Design and Facility Management ASHRAE Announces Call for Papers for 2013 Winter Conference, January 26-30, Dallas, Texas

ATLANTA – ASHRAE has announced a call for papers for its 2013 Winter Conference in Dallas, Texas, Jan. 26-30.

The Conference's technical program will focus on core HVAC&R tracks and, with the re-branding of ASHRAE highlighting its efforts in building technology, the Conference presents timely tracks on Large Building Design and Facility Management.

The Large Building Design track seeks papers that highlight the opportunities presented to the design and construction team with "larger than life" facilities and systems throughout the world.

The Facility Management track seeks papers that address energy conservation measurement case studies; new and revived management tools, e.g. building information modeling; increased technologies for automation systems; and overall facility management with an eye toward financial management.

The Energy Conservation track seeks papers that will highlight case studies and research that expand on the simple to the complex energy savings measures being implemented in today's and tomorrow's designs. This track addresses how designs are using more techniques to reduce energy with the use of heat wheels and pipes, solar hot water, PV systems, higher efficient equipment and many other concepts that are pushing to be standard design practice.

The Standards, Guidelines and Codes track brings to the forefront ASHRAE's work in standards and their intent on improving the built environment and its systems. Papers in this track seek to illustrate the changes to the standards and guidelines, their projected path and good design techniques to meet or exceed the standards.

The 2013 ASHRAE Winter Conference program includes additional tracks on HVAC&R Systems and Equipment, HVAC&R Fundamentals and Applications, Refrigeration and a Special Interest Track, which will be determined on the basis of papers and programs received.

"I am excited about the potential of the Special Interest Track developing into a mini-conference within the main Conference, covering the Industrial and Manufacturing sector that is very prevalent in Texas," Wade Conlan, an ASHRAE member who serves as chair of the technical program for the Conference, said. "The Conference seeks to draw on the expertise from those markets to present design, construction and operational case studies and generally accepted practices to the Conference attendees."

ASHRAE offers two types of paper submissions:

- Conference Paper Abstracts due March 19, 2012. Authors submit an abstract of the paper (400 words or less) for review by March 19. After acceptance, papers will be due July 9, 2012. These "final" papers undergo a single-blind review, are submitted as a PDF and have an eight single-spaced page maximum length.
- Full Technical Papers due April 16, 2012. Papers submitted for review must be both technically accurate and clearly written. These papers undergo a rigorous double-blind review and can be a maximum of 30 double-spaced pages.

To submit a Conference paper abstract and for more information about submitting a technical paper and the tracks, go to [www.ashrae.org/Dallas](http://www.ashrae.org/Dallas).

Held in conjunction with the 2013 Winter Conference is the AHR Exposition, Jan. 28-30, 2013, which is expected to attract more than 40,000 visitors and exhibitors.

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For Release:  
Feb. 10, 2012

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#### Return to Chicago Sees High Attendance, Rebranding for ASHRAE

ATLANTA –Chicago once again proved to be a popular destination for the 2012 ASHRAE Winter Conference, with high attendance numbers, as well as an exciting announcement about the future of the Society.

Some 2,800 people attended the Conference, held Jan. 21-Jan. 25, in Chicago, Ill. Attendance this year was higher than the past four Winter Conferences, except Las Vegas 2011.

Also taking place in conjunction with the Conference was the Air-Conditioning, Heating, Refrigerating Exposition, which attracted nearly 58,000 registered attendees, including a record 39,000 plus visitors. It was also the largest AHR Expo in the Show's 82-year history, at nearly 430,000 square feet, making it 5 percent bigger than the Show held in Chicago in 2006.

The biggest buzz at the ASHRAE Winter Conference was the announcement of ASHRAE's rebranding, which includes a new logo and tagline, as well as a move to refer to the Society as simply "ASHRAE," as opposed to its full name.

"The evolved ASHRAE brand supports our focus on improving engineering standards and our market position as a community of engineers and related professionals united by knowledge, mission and a code of ethics to design, construct and operate better places for people to live, work and play," ASHRAE President Ron Jarnagin, said.

A redesigned ASHRAE.org was also announced along with the rebranding during the Conference. The updated website provides better navigation, a better search engine and better tracking, all of which helps visitors find the information they need to support their efforts in the industry and the Society.

The Winter Conference technical program featured nearly 300 presentations, with the top attended session in the systems and equipment, O&M and high performance buildings tracks. The top-attended sessions were Selection of Proper Chiller Technology; Thermal Displacement Ventilation Applications; Heat Pump Optimization; Air Source vs. Ground Source Heat Pump Systems; Integrated Design Energy Retrofits; and Water-Cooled VRF Systems.

Other Conference highlights included the Technical Plenary, which drew 600 attendees, with its focus on Chicago's Energy-Efficient, Economic Model for Sustainability.

These, and additional sessions, from the Technical Program are part of ASHRAE's Virtual Conference, which provides access to more than 250 presentations and PDF's of posters. Register or access presentations at [www.ashrae.org/chicagovirtual](http://www.ashrae.org/chicagovirtual).

Also offered were six Professional Development Seminars and 14 short courses from the ASHRAE Learning Institute. The most popular courses were Complying with Standard 90.1-2010: HVAC/Mechanical; Energy Management in New & Existing Buildings; Understanding Air-to-Air Energy Recovery Technologies and Applications; and Designing Towards Net

Zero Energy Commercial Buildings. Additionally, two new courses were offered: Basics of Combined Heat and Power, which was very well attended, and Evaluating the Performance of LEED®-Certified Buildings.

Pencil and paper exams for all six ASHRAE certifications were also offered at the Conference; 27 people sat for the exams. Those who pass the exam will join the 1,100 others who have already obtained ASHRAE certifications. ASHRAE certifications include Building Energy Assessment Professional; Building Energy Modeling Professional; Commissioning Process Management Professional; Healthcare Facility Design Professional; High-Performance Building Design Professional; and Operations and Performance Management Professional.

Top selling publications included “Procedures for Commercial Building Energy Audits, second edition;” ASHRAE Pocket Guide; 2012 Winter Conference CD; Standard 90.1-2010 Energy Standard for Buildings Except Low-Rise Residential Buildings; Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality; “A Practical Guide to Seismic Restraint, second edition;” “Energy Efficiency for Existing Commercial Buildings: Technical Implementation;” and Standard 90.1-2010 User’s Manual.

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For Release:  
Feb. 21, 2012

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#### National Engineering Society Celebrates National Engineers Week

ATLANTA –Engineers don’t just shape our buildings and infrastructure; they help transform our world.

Atlanta-based ASHRAE is a partner in the National Engineers Week program (Feb. 19-25), which celebrates the contributions that engineers make to our society and encourages engineering as a career path among young students by promoting pre-college literacy in math and science. For specific information about the program, please visit [www.EWeek.org](http://www.EWeek.org).

“National Engineers Week is so important because it highlights the crucial role of engineering in our everyday lives” ASHRAE President Ron Jarnagin said. “Additionally, it gives engineers a chance to mentor and develop the future leadership of the industry—a key pillar of my presidential theme. The students and young engineers who are participating in this week’s events have the potential to influence and change engineering as we know it.”

ASHRAE has served as lead organization in National Engineers Week several times. The last time, in 2011, ASHRAE launched the New Faces of Engineering: College Edition program as part of the weekly celebration; College Edition complements the Society’s legacy program started in 2003, New Faces of Engineering.

New Faces of Engineering: College Edition recognizes outstanding juniors or seniors enrolled in a Bachelor of Science in Engineering program who are proving themselves to be leaders in the field of engineering.

ASHRAE’s first New Face of Engineering: College Edition is Ibrahim Adewale Ogundeko, third year, mechanical engineering, University of Lagos, Akoka, Nigeria. Ogundeko believes that if mechanical engineering were a part of speech, it would be a verb because “it is an action profession.” “Whatever is vividly envisioned, ardently desired and enthusiastically acted upon will inevitably come to pass in mechanical engineering,” he said. Ogundeko holds leadership positions in several engineering clubs and societies, including president, ASHRAE student branch; assistant secretary, Mechanical Engineering Students’ Association; and even plays for the Mechanical Engineering soccer team. Ogundeko will receive a \$1,000 scholarship to help him continue in his mechanical engineering education.

The New Faces of Engineering program promotes the accomplishments of young engineers across various disciplines by highlighting their engineering contributions and the resulting impact on public welfare. The program targets those age 30 and younger. Engineering associations, societies and government groups nominate candidates each year which are selected for recognition in USA Today.

ASHRAE's New Face of Engineering is Amy Jarvis, mechanical engineer, Mazzetti Nash Lipsey Burch, Portland, Ore. She holds a Bachelor of Science in Engineering, Harvey Mudd College, Claremont, Calif. As an engineer committed to local, national and global sustainability, Jarvis is one of three lead authors of the World Health Organization's forthcoming "Healthcare in the Green Economy, How Carbon Reduction May Impact Health in Health Sector Services," for which she developed strategies combining reduced carbon impact with improved health care and is also a contributing author to the Leadership in Energy and Environmental Design® (LEED) for Healthcare Reference Guide. She is the lead energy analyst and LEED coordinator for Kaiser Permanente's first LEED project and a key team member and lead energy modeler for the Kaiser Permanente Small Hospital Big Idea Competition to develop the hospital of the future with a near-zero environmental impact. Jarvis works with Healthcare Without Harm to develop guides for low-resource facilities to implement these strategies. Jarvis will be featured in a full-page ad in USA Today along with other participating societies' New Faces, as well as represent ASHRAE at the Annual Chartered Institution of Building Services Engineers (CIBSE) Meeting in London, U.K., this April.

Several events will take place in conjunction with National Engineers Week, including Introduce a Girl to Engineering Day (Feb. 23) and the Future City Competition (Feb. 21), at which ASHRAE members will serve as judges and award the Best Indoor Environment and Most Sustainable Building award.

Additionally, Representatives Daniel Lipinski (D-Ill.) and Donald Manzullo (R-Ill.) introduced a resolution with 23 bipartisan cosponsors supporting the goals and ideas of National Engineers Week. With the encouragement of ASHRAE, the governors of Arkansas, Florida, Hawaii and Kansas, as well as the mayor of New York City, were among those that also issued proclamations supporting EWeek.

"In these uncertain times, we always look for ways to promote future job creation, educating America's youth about engineering and science needs to be a national priority," Lipinski said in a speech on the House floor. "Each year, National Engineers Week seeks to do just this through events aimed at inspiring students and fostering public awareness of the vital contributions made by engineers."

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For Release:  
Feb. 22, 2012

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#### 50 Percent Energy Savings for Retail Stores Now Available, No Coupon Required

ATLANTA – Energy costs are typically the second highest operating expense for a retailer, so use of the latest 50% Advanced Energy Design Guide can help in creating a cost-effective design for medium to big box retail stores and can have a direct and significant impact on profitability.

For a discount on energy efficiency, owners, engineers, designers, architects and others on the building team are encouraged to download Advanced Energy Design Guide for Medium to Big Box Retail Buildings: Achieving 50% Energy Savings Toward a Net-Zero-Energy Building. The Guide applies to medium to big box retail buildings with gross floor areas between 20,000 and 100,000 sq. ft.; however, many of the recommendations also can be applied to smaller or larger retail buildings.

It is the third book in a series of Advanced Energy Design Guide (AEDG) publications that provides recommendations to achieve 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.

“When the comfort of a customer can impact a purchase in a shopping environment it’s important for retail stores to find a balance between energy efficient measures for the building and the convenience for their customers,” Shanti Pless, chair of the AEDG project committee, said. “This guide offers guidance and tips for implementing successful energy savings strategies while enhancing the shopping experience.”

The new guide features easy-to-follow recommendations for each of the US climate zones and tips on how to implement those recommendations. Case studies and technology examples provide real-life examples of how retailers have achieved significant energy savings.

Also included is information on integrated design, including best practices as a necessary component in achieving 50% energy and the inclusion of a performance path—specifically, offering annual energy use targets to help with goal setting.

Additional design tips include:

- Information on integrating absolute energy use targets into the design process.
- Retail-specific whole building and technology case studies.
- Different vestibule configurations to reduce outdoor air infiltration.
- Different ways to daylight sales floors, storage areas, offices and conference/break rooms.
- Methods to achieve space-by-space interior lighting power densities that are, on average, 45% better than Standard 90.1-2004.
- Sample design layouts and recommendations for ambient lighting, perimeter lighting, and accent lighting; including LED display lighting.
- Ways to reduced exterior (façade, walkway, parking lot and drive) lighting energy consumption.
- Recommendations for reduction and control of sales floor plug loads, office equipment, security system plug loads, vending machines, illuminated signs, and service water heating.
- HVAC roof-top unit configuration and zoning strategies.
- HVAC ventilation air control strategies.
- Recommendations for commissioning and measurement and verification to ensure that energy savings potentials are realized.

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 of North America (IES), the Department of Energy (DOE) and the United States Green Building Council (USGBC).

ASHRAE, AIA, IES, DOE and USGBC are currently developing the fourth and final guide in the 50% series, which will focus on large hospitals and be available in the spring of 2012.

The guide follows the earlier six-book 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 produce more energy than they consume.

Advanced Energy Design Guide for Medium to Big Box Retail Buildings: Achieving 50% Energy Savings Toward a Net-Zero-Energy Building is available as a free download at [www.ashrae.org/freeaedg](http://www.ashrae.org/freeaedg). A print version is available 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. Bulk discounts are available to individuals, companies and organizations who are interested in purchasing multiple copies.

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