

The Squirrel Cage —Alamo ASHRAE

ASHRAE - Alamo Chapter #65 **San Antonio, TX** **Issue: January 2014/ Volume LIII No. 1**

Alamo ASHRAE President's Message

Alamo ASHRAE,

I hope everyone had a great 2013 and I look forward to the New Year. The Alamo chapter had many firsts in 2013, such as the addition of the Trinity Student Chapter and a record breaking Oktoberfest Skeet Shoot. We look forward to similar successes in the New Year.

We are teaming up with the local SAME chapter this year. I would like to invite everyone out to the February SAME meeting on "New Year, New Green Building Rating Systems" which will be held February 11 from 11:30 a.m. to 1:00 p.m. at the DoubleTree Downtown. Follow this link for SAME February registration and information.

Our monthly luncheon will also be at the DoubleTree Downtown on February 18, please make a note! It should be a good one on "Embedded Tube Radiant Cooling". I hope to see you at the DoubleTree next to the UTSA Downtown Campus. Please see page 2 for more details.

The ASHRAE Winter Conference in New York was a cold one! The polar vortex once again dropped temperatures to as low as 5 degrees Fahrenheit. It was a great conference still. Our own Chris Delgado, YEA Chair was one of four selected in the world to participate in Leadership U. I look forward to hearing about his experience shadowing a Society officer throughout the conference. Please shoot me an email if you attended the conference so our chapter can get credit for our members' attendance.

The Alamo ASHRAE Golf Tournament is coming up, so please make sure to reserve your spots. If you have any questions or need more information, please contact Dan Seltzer at Dan.Seltzer@lpl.com.

Sincerely,

Rey Gutierrez, PE, LEED AP
2013-2014 Alamo ASHRAE President

ASHRAE Alamo Chapter

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ALAMO ASHRAE MEETING NOTICE: FEBRUARY 2014

Topic: **Embedded Tube Radiant Cooling**

Date/ Time: **February 18, 2014 / 11:30 am to 1:00 pm**

***** New Location: Double Tree, 502 West Cesar E. Chavez Boulevard, San Antonio, TX 78207 *****

Speaker: **Devin A. Abellon, P.E. – ASHRAE Distinguished Lecturer**

Meeting Sponsor: **Pepco**

Presentation Summary:

As more and more jurisdictions and building owners are requiring higher levels of LEED certification for their projects, design teams are looking beyond traditional HVAC solutions to provide the energy efficiency needed to maximize LEED points while maintaining occupant comfort and safety. In-slab radiant heating systems have enjoyed popularity both here in the United States and abroad for years. Now, with the availability of improved control systems and better understanding within the design and construction community, the same concept can be applied to radiant cooling as an energy-efficient and cost-effective solution. This program will cover the following topics:

- *Radiant Cooling Heat Transfer Fundamentals*
- *Radiant Cooling Performance/Capacity*
- *Typical Construction Methods*
- *Case Studies*

Attendees will gain an understanding of how in-slab radiant cooling systems can be used as part of an energy-efficient design solution to maximize Energy and Atmosphere credits for LEED certification, and see examples of how this has been accomplished on projects both here in the United States and abroad.

About the speaker:

Mr. Abellon is a registered professional engineer with over 17 years of experience in the HVAC field, designing systems for commercial, institutional, industrial, health care, and municipal projects. Mr. Abellon was Vice President and managing principal of LSW Engineers California, Incorporated in San Diego until 2009, when he accepted a position as Business Development Manager for Uponor North America. He now works closely with engineers throughout the country, supporting projects that integrate radiant heating and cooling strategies to maximize energy efficiency.

Mr. Abellon earned his B.S. degree from the University of California at Santa Barbara in 1993. He is an active member of ASHRAE on the local chapter, regional, and Society level and is currently the Programs Subcommittee Chair for ASHRAE TC6.5 – Radiant and Convective Space Heating and Cooling, as well as a Regional Vice Chair in Region X.



RSVP to Rezaur Raman @

rezaur@esaengineers.net

Cost: $25.00 with RSVP

$30.00 if no RSVP

$2.00 Service Fee for use of Credit Card

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Meeting Date & Topic: ***No Meeting in December***

Previous Meeting Attendance:

Speaker:

Board Of Governors Meeting Minutes

ASHRAE Alamo Chapter

January 2014



ALAMO ASHRAE

January MEETING MINUTES

January 15, 2013 – 11:30am-1:00 PM – EZ's Brick Oven & Grill

Presiding Officer: Rey Gutierrez

CALL TO ORDER

ROLL CALL: President – Rey Gutierrez, Treasurer – Aaron Caldwell, Governor – Rocky Ormand, Governor – Chris Garcia, Governor – Aaron Caldwell, CTTC – Brad Gilbert, RP – Dan Seltzer, Student Activities – Mario Mijangos, YEA – Chris Delgado, ,GGAC Chair-Chris Garcia, Government Activities/GGAC Co-Chair –Chris Delgado, RP Committee- Gwendolyn Hays

OFFICER & CHAIR REPORTS

Treasurer – Aaron Caldwell

- Financial Report
- Check for Golf Tournament Deposit
- Suggest buffet option at Oak Hills

CTTC – Brad Gilbert

- Need replacement speaker for January, speaker attending conference
- Booked DoubleTree Downtown for February meeting
- Contact AIA/USGBC to invite to our meetings/Webcast

http://directory.usgbc-centraltexas.org/event/

RP – Dan Seltzer

- Golf Tourney Date, May 23 possibly
- Wes, Gwendolyn, Rey, and Dan January 7 meeting updates
- RP committee, Dan, Gwendolyn, Rey, Wes, Todd and Rocky meeting January 30th to plan Golf Tournament
- PAOE Milestones

Student Activities – Mario Mijangos

- Scholarships
- April Meeting @ Trinity, Students to attend
- National Engineers week events at UTSA
- Geek Bus Tour
- UTSA Engineers week in March, very interesting!
- SAME K-12 Opportunities

Board Of Governors Meeting Minutes

ASHRAE Alamo Chapter



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Round Table similar to CC
- Todd, Mario, Wes, Rey, and Madison on Committee
- Request SWAG from National
- Possibly include STEM Bus

YEA – Chris Delgado

Possible Emerson/Liebert Presentation
Chris selected to Leadership Conference! Going to NYC, congrats!
- Board would like pictures and report. Possible presentation.

189.1 lunch presentation TBD

Newsletter – Baron Phillips

Golf Tournament, YEA, February Meeting announcement
Website/Constant Contact
Membership Toolkit

Grassroots Government Activities – Chris Garcia

Updates
Nat. Engineers Week
Newsletter Articles
Sustainability/189.1 presentation to local officials

NEW BUSINESS

Presidential Award of Excellence (PAOE)

Update points (Monthly)
Goals for 2013-2014

ASHRAE Region VIII Officers: http://region8.ashraeregions.org/officers.htm

ADJOURN



ASHRAE Alamo Chapter



TREASURER'S FINANCIAL REPORT: NOVEMBER 2013

ASHRAE Balance Sheet (2013-2014)

	Current As Of: 1/27/2014
ASSETS	
Current Assets	
Checking/Savings	
Checking	21,605.94
Money Market	8,121.90
Total Checking/Savings	29,727.84
Other Current Assets	
Petty Cash	200.00
Total Other Current Assets	200.00
Total Current Assets	29,927.84

ASHRAE News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

ASHRAE Publishes Revised Standard on Ventilation in Health Care Facilities

In some sense, designers of health care facilities must follow the same creed as health care professionals: to first do no harm. A newly revised standard for ventilation of health care facilities, can help designers by providing the minimum requirements for the design of ventilation systems for health care facilities to provide environmental control for comfort, as well as infection and odor control.

ANSI/ASHRAE/ASHE Standard 170-2013, *Ventilation of Health Care Facilities*, was written by ASHRAE and the American Society for Healthcare Engineering (ASHE). When the standard was first published in 2008, it was the first American National Standards Institute (ANSI) standard in the nation to specifically address ventilation in health care facilities.

"Without high-quality ventilation in health care facilities, patients, health care workers and visitors can become exposed to contaminants through normal respiration of particles in the air." Paul Ninomura, chair of the 170 committee, said. "Ventilation systems and designs for health care facilities are intended to provide a comfortable environment for patients, health care workers and visitors while diluting, capturing and exhausting airborne contaminants including potentially infectious airborne agents."

Standard 170 has been in constant maintenance since 2008 and the past five years have provided an opportunity to review and further improve it. The revised standard features updates, changes and clarifications dealing with humidity, ducted returns, recirculating rooms units and duct lining, to name just a few refinements.

One trend that almost all classes of buildings have seen on the rise lately has been energy efficiency. Health care facilities can be energy extensive buildings and energy recovery can provide significant savings. Provisions for the application of energy recovery are now specifically addressed in 170-2013. However, as the standard stipulates, if energy recovery systems are utilized, the systems cannot allow for any cross-contamination of exhaust air back to the supply airstream. Run around coils are just one example of a system that is permitted, according to Ninomura.

The standard also addresses some issues that may reduce costs to build and operate health care facilities. Standard 170 allows relative humidities as low of 20 percent for some rooms. This may result in smaller capacity of humidification equipment, lower operating costs and reduced maintenance costs. The standard permits some use of plenum returns in outpatient facilities, which in turn may result in lower construction cost and operating costs.

Additionally, some hospitals are interested in utilizing displacement ventilation to reduce operating costs. The standard addresses the application of displacement ventilation within patient rooms.

Poorly ventilated health care facilities may increase the concentration of airborne contaminants including fungi or mold, which may cause allergic responses in even healthy workers and occupants. Considering the various occupancies and patient populations, great care must be taken in the design of health care ventilation systems.

The cost of ANSI/ASHRAE/ASHE Approved Standard 170-2013, *Ventilationof Health Care Facilities*, is $58 ($48, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

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, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

For Release:
Dec. 30, 2013
Contact: Amanda Dean
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ASHRAE News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

Refrigeration Commissioning Guide Seeks to Ensure Systems Work Right; Free Download Available

ATLANTA – Sixty percent of energy use in supermarkets is attributed to refrigeration, and studies have shown commissioning could result in 7 to 25 percent energy savings. A new guide from ASHRAE outlines a commissioning process that would result in substantial savings.

"Refrigeration Commissioning Guide for Commercial and Industrial Systems" provides user-friendly, how-to guidance for commissioning of custom-engineered refrigeration systems in commercial and industrial facilities. The book was funded in part by the U.S. Department of Energy through the National Renewable Energy Laboratory

The book is available for free download at www.ashrae.org/freeRefCxGuidance.

"Custom refrigeration systems are complex and individually designed for each facility," Richard Royal, who served as chair of the committee that wrote the guide, said. "Deficiencies in the system design found at start-up are not easily resolved and, as a result, maintenance managers or operators deal with unnecessary shortcomings and expenses over the life of a facility. The value of commissioning is to establish a consistent stepwise process that helps 'get it right the first time,' resulting in refrigeration systems that 'work right' and minimize maintenance and energy costs."

The U.S. Environmental Protection Agency (EPA) estimates that supermarkets typically use approximately 3,000,000 kWh of electricity per year, with 60 percent of that energy use attributed to refrigeration (EPA 2007). Portland Energy Conservation, Inc. (PECI) predicts that commissioning in existing grocery stores would result in 7 percent to 25 percent energy savings per year (PECI 2010). Based on these estimates, this commissioning guide, if widely adopted, would lead to substantial energy savings.

"Thousands of refrigeration systems are installed every year in facilities ranging from convenience stores to large, sophisticated frozen food distribution centers," Royal said. "Properly commissioned systems reduce energy cost, are easier to maintain, help minimize liabilities from refrigeration leaks and reduce loss of product to system failures or unreliable performance."

Royal noted that commissioning of refrigeration systems is uncommon in the industry. One reason is a belief that commissioning results in added cost and time without sufficient or measureable value.

"Certainly, commissioning is an investment, but it provides significant financial value in several ways," he said. "First, systems operate more reliably with lower maintenance cost and lower energy cost when commissioning is applied as described in this Guide. Second, incorporating commissioning can reduce first cost through improved understanding of system performance and lead to better equipment design and installation methods."

The guide will help achieve cost-effective and cost-efficient refrigeration systems for new projects, expansions, remodels and existing systems that simply need a tune-up. For commercial facility owners and managers, this means improved profitability through lower operating and service costs as well as reduced product loss. For industrial plants, this means improved "up time" and improved labor productivity in addition to reduced operating cost, according to Royal.

ASHRAE News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

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Also included in the Guide is information on commissioning during planning and design; construction and installation; and system start-up and first-year operation. A matrix helps delineate roles and responsibilities. Examples of commissioning checklists and acceptance plans can be used for reference or template.

A printed version of the Guide is slated to be available in early January 2014. The cost of the printed version is $99 ($84, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

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For Release:
Jan. 3, 2014

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ASHRAE News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

Revisions to Climate Data Standard from ASHRAE Include New Climate Zone, Climatic Data

ATLANTA—The newly updated Standard 169, *Climatic Data for Building Design Standards*, serves as a comprehensive source of climate data for those involved in building design, and provides a variety of climatic information for designing, planning and sizing building energy systems and equipment.

"Using the results from ASHRAE Research Project 1453 'Updating the ASHRAE Climatic Data for Design and Standards,' the data and tables in the standard were completely replaced," Dru Crawley, chair of the committee writing the standard, said.

An additional "Extremely Hot" Climate Zone 0 with humid (0A) and dry (0B) zones has been added, and the standard now includes climatic data for 5,564 locations throughout the world.

"With this major revision, Standard 169 now includes climate zone maps for the entire world, as opposed to the 2006 standard which only included a U.S. climate zone map," Crawley said. "This allows users outside the U.S. to more easily determine which climate zone their location is in."

The standard touches on dry-bulb, dew-point and wet-bulb temperatures; enthalpy; humidity ration; wind conditions; solar irradiation; latitude; longitude; and elevation for locations worldwide.

Standard 169 also includes statistical data, such as mean temperatures; daily ranges; degree hours; and seasonal percentages within ranges of temperatures, to name just a few.

The cost of ANSI/ASHRAE Standard 169, *Climatic Data for Building Design Standards*, is $72 ($61, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit www.ashrae.org/bookstore.

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For Release:
Jan. 8, 2014

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ASHRAE News

ASHRAE PRESS RELEASE—ANNOUNCEMENT

BACnet Web Services Updates and Call for Participation in a Virtual Plugfest

NEW YORK – The BACnet committee has approved an update to BACnet/web services (WS) to better support more sophisticated needs such as smart grid and energy management.

ANSI/ASHRAE Standard 135-2012, *BACnet – A Data Communication Protocol for Building Automation and Control Networks*, allows building equipment and systems manufactured by different companies to work together. It is the only open, consensus-developed standard in the building controls industry.

The BACnet committee announced this week at ASHRAE's 2014 Winter Conference that addendum 135 *am* is slated for public review in the first quarter of 2014. In order to drive a deeper review, the committee is conducting a "virtual plugfest" for prototype implementations.

An open source BACnet/WS server reference implementation has been developed to seed the plugfest, it can be used as a test subject for client development and a basis for server prototypes, according to Carl Neilson, chair of the Standard 135 committee. The committee is asking for implementations of both client and server prototypes.

The virtual plugfest will be conducted online and is expected to begin mid-March and run through early April.

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For Release:
Jan. 23, 2014

Contact: Jodi Scott
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ASHRAE News

ASPE Networking Event

Join your peers at this FREE social and networking event exclusively for ASPE Young Professionals. At this free networking event, you'll have the chance to meet other AYP members, sign up to join AYP on a national level and be a voice within the Society.

Register today!

http://aspe.org/aypnetworking

These events include light appetizers and one complimentary drink ticket.

Tuesday, February 11
Boiler House *(At Pearl Brewery)*
312 Pearl Parkway, Building 3
San Antonio, TX

5:30 – 8:30 p.m.

ASPE American Society of Plumbing Engineers YOUNG PROFESSIONALS