

# ASHRAE San Diego Newsletter



REGION X  
[www.ashraesd.org](http://www.ashraesd.org)  
Volume 5, Issue 1

January 2013

**Interested in becoming more involved with ASHRAE through joining or chairing a Committee or becoming a Chapter Officer?**

**To find out how, contact one of the existing Chairs or Officers or visit [www.ashraesd.com](http://www.ashraesd.com)!**

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## Call for all the ASHRAE 2013 Winter Conference Delegates!

If you were a delegate at the ASHRAE 2013 Winter Conference in Dallas, TX this year, we want to hear from you! Share your photos, experiences, new discoveries and lessons learned with the ASHRAE San Diego Chapter in next month's newsletter.

Contributions to the newsletter will earn recognition for you and your company and, more importantly, bring the knowledge of the greater ASHRAE community home to San Diego.

Please send all contributions to:

Calina Ferraro, ASHRAE SD Newsletter Editor  
[cferraro@randallamb.com](mailto:cferraro@randallamb.com)

We look forward to hearing from you!

# ASHRAE San Diego February Meeting- Exploring Innovative Technologies in HVAC

When: Tuesday Feb 12, 2013 from 11:30 AM to 1:30 PM PST  
Where: The Butcher Shop  
5255 Kearny Villa Road  
San Diego, CA 92123

Cost:  
ASHRAE Member: \$35.00 (RSVP by February 8, 2013)  
ASHRAE Member: \$40.00 (after February 8, 2013)  
Non-Member: \$50.00  
Student/Retired: \$20.00



Presented by **Dan Prusia**

Healthcare construction codes and guidelines are created to ensure the safety of patients, staff, and the public.

More and more spaces, per code, require pressurization, high air change rates, or 100% outdoor air. These guidelines also state that for energy conservation air change rates (ACH) may be reduced during unoccupied periods with the caveat that pressurization be maintained during any setback or shutdown of airflow. Consequently, facility managers face many challenges when trying to optimize safety and sustainability as often the standard methods used in facility design and selection often run counter to safety and energy initiatives.

Constant volume systems can maintain constant airflow from functional aspect, but they unnecessarily consume large amounts of energy and add to operational costs. Commercial VAV boxes, the common air control design for commercial buildings, have shown to be incapable of accurately reducing airflow and maintaining proper set-points overtime in healthcare spaces. Engineers and facility managers have been reluctant to turndown critical care areas of a hospital due to concerns over life safety, infection control and health.

Innovative and precision airflow control technologies can enable energy savings AND control pressurization in high consequence spaces.

We will review of current guidelines and explore innovative technologies that are available to help provide proper airflow control. We will look at examples of hospitals that have implemented innovative technology with successful results.

## **Learning Objectives:**

1. Overcome Problem Areas That Waste Energy: Explore energy consumption problems facing facilities in the operation of HVAC ventilation.
2. Understand Existing Guidelines: Review current and pending energy/safety codes and learn how to best position your facility to achieve compliance and easily adapt to change to ensure safety and sustainability.
3. Explore Alternate Selection: Examine standard design methods and learn about innovative technologies for new construction/renovation that will reduce operation costs quickly and help you meet energy reduction directives.
4. Study Case Examples: Look at how other facility managers and engineers have faced similar hurdles and examine how they achieved satisfactory performance objectives with effective modeling and operation.
5. Practice Using Energy Modeling Software: Delve into "Optimizer", an energy modeling software that helps you determine areas of savings and waste. Come share information about a problem area and watch a live demonstration of energy modeling that will provide you with information that can be used to determine how to achieve energy efficiency in your healthcare facility that satisfies executives, staff and patients.

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## Upgrade Your ASHRAE Status from "Associate" to "Member"!

Erik Sanchez

Johnson Controls

Membership Promotion Chair, 2012-13

Have any co-workers at your office who are not currently members in ASHRAE? Explain to them why you're a member & the benefits you enjoy, and then bring them out as your guest to our next meeting! If they join, both you & your guest will receive lunch on us as part of our Member-Get-A-Member program. Just contact me, Erik Sanchez, at [Erik.D.Sanchez@jci.com](mailto:Erik.D.Sanchez@jci.com) or come find me at the next meeting.

If you are an industry professional with 8 or more years of "equivalent industry experience," you are eligible to upgrade your membership status from Associate to Member at NO ADDITIONAL COST... Contact me to find out how!

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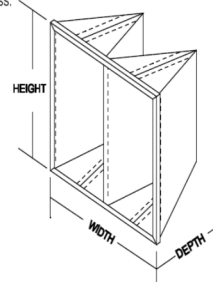
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### SPECIFICATIONS

1. OSA MIST / MOISTURE SEPARATOR
2. HIGH PERFORMANCE SYNTHETIC MEDIA - ANTIMICROBIAL TREATED
3. MEDIA IS BONDED TO THE ENTIRE PERIPHERY OF THE HEADER ELIMINATING AIR BYPASS.
4. MERV 8: ASHRAE 52.2 (LEED)
5. EFFICIENCY: 90% - ASHRAE 52.1
6. ARRESTANCE: 90% - ASHRAE 52.1
7. INITIAL PRESSURE DROP - .20" W.G. (LEED)
8. UL CLASS 2

### SIZES

1. NOMINAL FILTER SIZE: 24" x 24" x 12" (MODEL CC242412)
2. NOMINAL FILTER SIZE: 20" x 24" x 12" (MODEL CC202412)
3. NOMINAL FILTER SIZE: 12" x 24" x 12" (MODEL CC122412)



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Air-Cooled Models, Sizes from 3 to 30 Tons  
Single and Dual Circuit  
(OSP 0173-10)

### Chiller Standard Features (Air-Cooled)

- Digital Scroll Compressors
- Electronic Expansion Valves
- EC Motor Driven Condenser Fans
- All Aluminum Micro-channel Condenser Coils
- Pumps
- Stainless Steel Buffer Tanks

### Chiller Options

- High Ambient Package
- OSP Models
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Are you looking to educate ASHRAE members on your products or services?

Table Tops can be purchased at our meetings for \$200, contact a Board Member for more information!



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## Proposed ASHRAE Standard on Prevention of Legionellosis Open for Third Public Comment

ATLANTA—Changes to clarify requirements in a proposed standard to prevent legionellosis associated with building water systems are open for public comment from ASHRAE.

Standard 188P, Prevention of Legionellosis Associated with Building Water Systems specifies what must be done to control the spread of legionellosis. The standard helps facility managers/owners understand how to apply the available information on Legionella effectively in order to prevent cases of legionellosis associated with building water systems.

The proposed standard underwent an earlier public review in June 2011 and is currently open for a third public review from Jan. 25-March 11, 2013. For more information, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

William McCoy said the committee received more than 150 comments during the 2011 review. The input helped the committee in clarifying many aspects of the standards. Changes being proposed to the third review based on that input, include:

- Clarifications made to definitions in Section 3, Definition of Terms and a new term was defined.
- Clarifications made to Section 5, Risk Characterization. Those changes were substantive because building characteristics were reorganized into two subsections for clarity, subsections 5.2 and 5.3.
- Reorganization of Table 1, Determining Preventative Measures Required for Buildings. The improvements reference two subsections of Section 5 (Sec 5.2 and 5.3).
- Creation of a new subsection, 7.4, Water System Treatment and Management Program, in Section 7. Commenters indicated there should be specifications for a “water system treatment and management program” for buildings with none of the risk characteristics (now listed in Sec 5.2) but with any of the equipment specified (now listed in Sec 5.3),.
- Clarifications to Section 8 regarding wording, references, cited regulations and informative notes.

Compliance with the standard requires facility managers/owners to formally take responsibility for controlling Legionella in their building water systems, while at the same time acts as a defense against accusations of negligence in those cases which are caused by the hazard from unknown sources.

Standard 188P also covers the potable water system in buildings, which are not treated as often as cooling towers, and will hold facility managers/owners accountable for properly managing the entire building water system both potable and utility water.

The standard differs from ASHRAE Guideline 12, Minimizing the Risk of Legionellosis Associated with Building Water Systems, in that while the guideline gives recommendations about how to treat various building water systems, the standard specifies the practice of exactly what must be done with all those recommendations.

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 within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today.



Presenters



Thomas E. Watson,  
ASHRAE President



Drury Crawley, Ph.D



Jim Kelsey, LEED AP,  
P.E., BEAP



Christopher Mathis

# Assessing Building Energy Performance:

## *From Principles to Practice*

April 18, 2013 | 1:00 PM-4:00 PM EDT

This webcast will feature industry experts who will explain the importance of building energy performance and its far-reaching implications in both new and existing buildings. Viewers will also learn about the various tools and approaches that are available, as well as the many opportunities that assessing building energy performance presents.

### How to Participate

- You may register to view the webcast on your PC
- You may host a webcast viewing site for your colleagues
- View the webcast at a site

### PDH Credits

Three (3) Professional Development Hours (PDHs) or three (3) AIA Learning Units (LUs) may be awarded to viewers who complete the "Participant Reaction Form" by May 2, 2013.

For more information about the program, presenters, continuing education credits, sponsorships, and ABEP resources, please visit us at [www.ashrae.org/ABEPwebcast](http://www.ashrae.org/ABEPwebcast) OR scan this tag with your smart phone.



Get the free mobile app at  
<http://gettag.mobi>





## The YEA Page!

YEA San Diego is for young professionals in our industry who are 35 years of age or younger. This group will focus on issues more relevant to those who are relatively new to the industry.

If you have any questions, comments, suggestions or would like to be added to the email list for future events, please let me know

Eian Schnoor

YEASanDiego@gmail.com

ASHRAE San Diego YEA Chair



See

<http://www.ashraesd.org/yea.html>  
for upcoming YEA events & info

### January Y.E.A. Event !!

The San Diego chapter of Young Engineers in ASHRAE (YEA) will be getting together for some good 'ol fashion fun this month!

Here are the details:

**Who:** Anyone associated with ASHRAE

**What:** Young Engineers in ASHRAE January Event

**When:** Tuesday January 29th, 2010. 5pm-8pm

**Where:** Boomers! San Diego: 6999 Clairemont Mesa Blvd., San Diego, CA 92111

**Wristband:** \$15.95 includes unlimited: Go Carts; Bumper Boats; Video Games

**Incentive:** First (12) people\* to show up will receive a free wristband!!



Please contact Eian Schnoor (904.477.6992; eian.j.schnoor@jci.com) you have any questions.

*It's gonna be Grrrrrrreat!*

## HVAC ENGINEER

We are a small HVAC Engineering firm located in Cardiff with a good reputation in the small community of HVAC Engineers in San Diego County. We work hard and take a great deal of pride in the services that we provide our clients.

The candidate we are looking for has two to three years of experience with HVAC Design, a Bachelors of Science degree in Mechanical Engineering and is very personable. PE Registration is a plus. The skills that we are looking for include:

- Building Load Calculations
- Equipment Sizing and Selection
- CAD Drawing Setup (3D CAD or Revit is a plus)
- Equipment Layout
- Duct and HVAC Pipe Sizing and Layout
- Title 24 Paperwork
- City Plan Check Response

Our company offers competitive compensation, based on experience. We also offer a retirement plan with employer matching, paid vacation, health and dental insurance and other miscellaneous benefits.

If interested in this or other positions with our company, please submit your resume to [labbott@abbotteng.com](mailto:labbott@abbotteng.com)



# ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference and AHR Expo in Dallas, TX

## 2 WAYS TO REGISTER

**Internet:** [www.ashrae.org/dallascourses](http://www.ashrae.org/dallascourses)

**Phone:** Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

### Full-Day Professional Development Seminars

**\$485/\$395** ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

#### The Commissioning Process in New & Existing Buildings

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

#### Complying with Standard 90.1-2010

Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

#### Data Center Energy Efficiency

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

#### Energy Modeling Best Practices and Applications: HVAC/Thermal

Tuesday, Jan 29 – 9:00 a.m. to 4:00 p.m.

#### Healthcare Facilities: Best Practice Design & Applications

Saturday, Jan 26 – 8:00 a.m. to 3:00 p.m.

### Half-Day Short Courses

**\$159/\$119** ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

#### Air-to-Air Energy Recovery Fundamentals

Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

#### Commissioning Process & Guideline 0

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

#### Humidity Control: Applications, Control Levels and Mold Avoidance

Sunday, Jan 27 – 2:00 p.m. to 5:00 p.m.

#### Evaluating the Performance of LEED®-Certified Buildings

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

#### Air-to-Air Energy Recovery Applications: Best Practices

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

#### Optimization of HVAC Systems & Components: Techniques & Real-World Examples

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

#### Application of Standard 62.1-2010:

#### Multiple Spaces Equations & Spreadsheet

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

#### Energy Management in New and Existing Buildings

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

#### Combined Heat & Power: Design through Operations

Monday, Jan 28 – 8:30 a.m. to 11:30 a.m.

#### Avoiding IAQ Problems

Tuesday, Jan 29 – 9:00 a.m. to 12:00 p.m.

#### Understanding Standard 189.1-2011 for

#### High-Performance Green Buildings

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

#### Designing Toward Net Zero Energy Commercial Buildings

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

#### Introduction to Ultraviolet Germicidal

#### Irradiation (UVGI) Systems

Monday, Jan 28 – 2:45 p.m. to 5:45 p.m.

Monday, Jan 23 – 2:30 p.m. to 5:30 p.m.

#### Understanding & Designing Dedicated Outdoor Air Systems

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

#### Laboratory Design: The Basics and Beyond

Tuesday, Jan 29 – 1:00 p.m. to 4:00 p.m.

## HVAC Design Training

**Jan 14-18, 2013 • Jan 30-Feb 1, 2013 (Level I only) • Mar 18-22, 2013 • Jun 3-7, 2013 • Aug 12-16, 2013**

### HVAC Design: Level I - Essentials

Gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

### HVAC Design: Level II - Applications

Developed by industry-leading professionals, the workshop provides participants with advanced level information about designing, installing and maintaining HVAC systems that can be put to immediate use. Participants will gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides, as well as a range of other HVAC topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

Visit [www.ashrae.org/hvacdesign](http://www.ashrae.org/hvacdesign) to register