

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XLVIII - NUMBER 4

January 2010 Dinner Meeting

Date: Thursday, Jan 7, 2010

Place: Scott's Seafood, 2 Broadway Ave, Oakland ([map & directions](#))

Schedule:

5:30 PM Registration and Social Hour
6:30 PM Dinner with announcements and introductions
7:45 PM Break
8:00 PM Main Program
9:00 PM Adjourn

Cost:

	<u>Before 3pm.</u> <u>Mon, 1/4</u>	<u>After 3pm.</u> <u>Mon, 1/4</u>
<u>GG-</u> <u>ASHRAE &</u> <u>USGBC</u> <u>members</u>	\$40	\$50, but please register
<u>Non-GG</u> <u>ASHRAE</u> <u>members</u>	\$50	\$55, but please register
<u>Students</u>	Free but please register	
<u>Voucher</u> <u>holder</u>	Free but please register	

Please make your reservation at www.ggashrae.org/meetings/2009-2010/jan.htm

NOTE: If you make a reservation and cannot attend, you need to cancel in advance, or you will be billed. Isabelle Lavedrine will be taking reservations. If you need to CANCEL, please send a message to Isabelle at cancellation@ggashrae.org.

Main Presentation: Greening the Building Codes: Standard 189.1 for High-Performance Green Buildings



Speaker: Kent W. Peterson, PE

Speaker Bio: ASHRAE Presidential Fellow; Chair of ASHRAE/USGBC/IES Standard 189.1 P2S Engineering; Long Beach, CA

Kent Peterson is Vice President and Chief Engineer at P2S Engineering with over 25 years of experience working in consulting engineering. His award-winning design experience includes ultra-energy-efficient central plants, high-performance green buildings, and innovative energy-efficiency strategies. He constantly strives to improve best practices in the building industry.

He is chair of the ASHRAE Associate Society Alliance working with 49 professional societies around the world. He also chairs the California State University Mechanical Review Board assisting with improving mechanical systems on the CSU campuses.

Mr. Peterson serves as Chair of ASHRAE/USGBC/IES Standard 189.1 – Standard for the Design of High-Performance Green Buildings. Mr. Peterson has authored a number of articles and papers and has made presentations to governments and professionals throughout the world on improving energy efficiency.

Presentation Summary: Standard 189.1, The standard is intended for code adoption and provides minimum requirements for high performance new buildings and major renovations. The standard addresses energy efficiency, water use efficiency, IEQ, material and resources and more.

Golden Gate Chapter President's Message - A look back at the decade



Dear Golden Gate ASHRAE Members and friends,

Happy New Year if you receive this after a long holiday break.

As I look back at this last decade, I reflect on where we have been, where we are today and where we are going. To say that our industry, the nation and the world has changed since the Y2K days is an understatement. We truly are making a difference and will do so in the coming years.

Although this last decade included a few rough years, I am hopeful that we are on the track for more-prosperous times. We have made it through terrorist attacks, countless financial and energy market meltdowns, and several deep recessions. And through those obstacles, ASHRAE as an organizations and we, the members, have started to reinvent the HVAC industry and the built environment. The concept of Zero Energy is a reality for some building designs. Most buildings can easily be 30% better than ASHRAE 90.1 and/or Title-24 Part 6. The integration of Efficiency Measures and Renewables with progressive architecture has been well demonstrated. ASHRAE along with the USGBC continues to create Standards and programs that cultivate high performance design.

What better way could there be than for us to have a joint meeting with the NCC-USGBC and for us to listen to Kent Peterson speak on Standard 189.1 which will soon be released. Please sign up on our meetings page [here](#). We hope to see you at the January 7th meeting at Scott's Seafood.

I am honored to serve the Chapter as President during these amazing times. I thank all of you for participating and I encourage you to join us at our upcoming monthly meetings.

Best Regards,

Scott Wayland,
Golden Gate ASHRAE President

Historian Article – History, Now, but what of the Future?

Tom Gilbertson – Chapter Historian

What will have the attention of ASHRAE in 50 years....in the year 2059?

Let's look back 50 years, and see what had ASHRAE's attention in 1959....

The "school" business was **big!**...Unit ventilators carried the day, individuals made a living by calling on school boards and influencing the boards to direct the architect to select their brand of "unit ventilator". ASHRAE had three different and distinct cycles for control of the dampers and valves within the individual classroom unit ventilators. And the truth is that these unit ventilators did a very good job of ventilating and heating the classrooms.

Then came the "School room Project"....and the "Rooftop Multi-zone" was born. Lennox in 1965 introduced the roof-top, classroom multi-zone units, and Carrier, and Nesbitt, Mammoth, and Acme...to name a few, all offered "the roof-top multi-zone".....and the "unit ventilator" business pretty much just died.

Today you can hardly find a "roof-top multi-zone"....and it is almost equally as hard to find an individual that is fully knowledgeable about "Unit ventilators"....and their "ASHRAE-labeled control cycles"....or even knows what unit ventilators are.....or should I say "were"?

The point is, 45 years ago equipment, including systems and applications that provided jobs to ASHRAE members, is virtually no longer made....so....what will we have, 45 or 50 years from now?What will be the focus of ASHRAE?

San Francisco had over 50 consulting firms that did mechanical engineering...how many today?

Look back to 1962.....no CAD drafting.... no hand-held computers...no computer load calculations...no computer duct design...no computer controlled metal cutting....in fact not all offices had copying machines.....(our office had an "adding machine")... I do recall that from time to time we had a three-martini lunch...and you all know those are long gone, too!

But **WHAT** will ASHRAE members be doing in 45 to 50 years?....and just "who" will be designing the equipment that embraces the industry that surrounds ASHRAE members?

To venture a guess...I think that "ASHRAE" will have moved from a society that emphasizes "heating, Cooling ventilation, and refrigeration"...and the crafting of those requirements for human comfort and food processing and preservation...to an industry of fully pre-engineered packages that will meet the needs of people who live and work in extremely energy-efficient structures that are virtually "stand-alone" as far as electrical power is concerned.....All of the "housing" will have solar and wind combination electrical generating capability.....and ASHRAE will be the group that weaves this all together.....why not?...who is any more familiar the real energy needs of people, and how to deliver them, than ASHRAE members?....No one...in my estimation.....I'd like to hear from someone who can give their opinion as to what we will have for ASHRAE members, even in 10 years from now...let alone 50 years.

Need I remind you that 50 years ago we had De Soto, Nash, Hudson, Kaiser-Frazer, Studebaker, Plymouth, and Packard, too.....and in 50 years?

Marble Draw

Many thanks to our sponsors Nazzaro and Associates, Air Treatment Corporation and Siemens for donating fantastic prizes at the joint December meeting! So far this year, we have collected over \$450 for ASHRAE research. Keep on contributing to this great cause! The marble draw odds are down to 1 of 8 and the pot will be \$500. Get ready to buy your marble draw tickets! We are always in need of meeting sponsors. If you would like to donate a prize for a future meeting, please contact Sheila Ruder at sruder@rumseveengineers.com or 510-663-2070.

Student Activities

John Williams – Student Activities Chair

We are pleased to let you know that Sid Palmer of the California Maritime Academy has been awarded a travel grant to attend the 2010 ASHRAE winter meeting in Orlando. He will have opportunities to mix with other ASHRAE students and attend the expo and technical program. Sid tells us how getting involved with HVAC after a good grounding in mechanical engineering studies has allowed him to apply his studies in a real life application. We hope the trip deepens his enthusiasm in our industry and we look forward to hearing all about it when he returns.

I am sure Sid can contest; the application process is not very enduring, so if you'd like to be considered for upcoming grants, please check out the website for an application:

- **March 19, 2010 for the Travel Grant to the [Summer Meeting in Albuquerque](#)**
- **April 16, 2010 for the Eric T. Andresen and Golden Gate Chapter Scholarships**

http://www.ggashrae.org/awards/docs/GG_ASHRAE_2009-2010_Student_Awards_Application.pdf

The Chapter is committed to fostering relationships with students at all levels to encourage interest and convey the importance of our industry in the built environment. However to foster this support won't be a single handed job. Working closely with the Chapter YEA's in particular we hope to get involved with local schools, colleges and universities to actively increase our presence. Please contact me if you are interested to help out.

FREE DINNER ALERT!!! We encourage our youngest members to come along to any of or regularly scheduled chapter meetings and we will buy you dinner! All that is required is that you are a registered student member of ASHRAE. Student membership application is available on-line at <http://www.ashrae.org/students/page/698>

Contact info – john-g.williams@arup.com (415) 946 0230

ASHRAE Research Report

Jeff Violet – Research Promotion

The 2009-10 ASHRAE Research contributions are off to a very good start

A special thank you to contributors who gave on the honor level or above:

Corporate Golden Circle (\$10,000+)

Corporate Honor Roll (\$250+)

Taylor Engineering

Individual Honor Roll (\$100+)

*Edgar DeGuzman
Thomas Weaver
Isabelle Lavedrine
Scott Wayland
Max Sherman
Jeff Violet
John Roth
Annie Foster
James Nemechek*

*Gerald Yaffe
Kristin DeMartini
Gary Harbison
Jeff Blaevoet
James MacDonald
Alonzo Laws
Yalek Ho
Kyle Blocker
Osamu Yamauchi*

Several members are making smaller contributions on a monthly basis. Their names will soon be on this list.

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

To make contributions please contact Jeff Violet, jviolet@myeesi.com, 415-724-1214

Chapter Technology Transfer Committee (CTTC)

Tyler Bradshaw, ASHRAE Golden Gate CTT Committee Chair

2009/2010 Technology Awards

We're well on our way to a good start this year and it's not too late to start working on your entry for the 2009/2010 competition. **Entries must be submitted by February 28th 2010.**

The submitted project should be completed and occupied for one year by the due date for the Society award application - September 2010. Therefore, your project should have been occupied by September 2009.

There are three stages of competition and awards: Chapter, Region and Society. The first step in this process is to submit your project to the chapter level competition.

First place winners from the Chapter competition move onto the Region X Award Competition. Then the Regional first place winners are eligible to move onto the Society competition.

Every year ASHRAE conducts the Technology Awards program to:

- Recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data;
- Communicate innovative systems designs to other ASHRAE members;
- Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

Each year Society presents awards in some of the thirteen categories: Commercial Buildings (New and Existing); Institutional Buildings (New and Existing); Health Care Facilities (New and Existing); Industrial Facilities or Processes (New and Existing); Public Assembly Facilities (New and Existing); Residential Buildings (New and Existing) both single family and multifamily (Low & High Rise); Alternative or Renewable Energy Use.

For each category a first, second, and honorable mention winner may be named. Also, one of the category first place winners may be selected to receive the ASHRAE Award of Engineering Excellence. The recipient will have demonstrated the best overall compliance with the judging criteria.

Please see our CTTC website or the following links for more info.

<http://www.ashrae.org/publications/detail/14703>
<http://www.ashrae.org/publications/detail/14704>
<http://www.ashrae.org/publications/detail/14692>
<http://xp20.ashrae.org/STANDCOM/ShortForm.pdf>

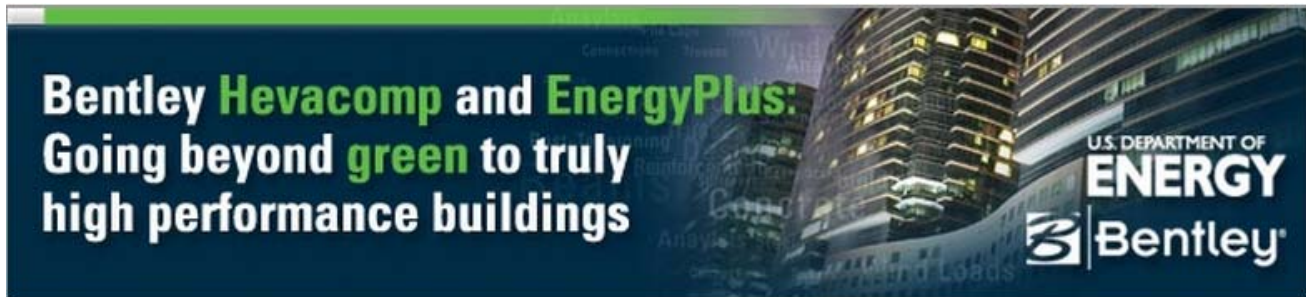
Free ASHRAE Webcast April 21, 2010

Mark your calendars! **"Right from the Start – Commissioning for High Performing Buildings"** webcast registration begins March 2, 2010. Go to <http://www.ashrae.org/Cxwebcast>

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 Tyler Bradshaw at tbradshaw@rumseyengineers.com.

Announcements



Please join the U.S. Department of Energy and Bentley Systems
for an educational lunch & learn:

'Bentley Hevacomp and EnergyPlus:

Going beyond green to truly high performance buildings.'

EnergyPlus is a fully integrated building, envelope, HVAC, water, renewables, and emissions simulation program. Bentley's **Hevacomp** software couples **EnergyPlus** with complete simulation capabilities, including BIM modeling, HVAC design and ASHRAE compliance.

DOE's Dru Crawley, who leads the Department's Commercial Building Initiative, will explain how **EnergyPlus** can be used, and some of the valuable features included in the latest version. Bentley's Noah Eckhouse, Vice President of Building Performance, will describe how **EnergyPlus** operates within the Bentley **Hevacomp** environment and is used by architects and engineers for both conceptual and detailed design. He will also share a number of real-world design scenarios explored and validated using Bentley **Hevacomp**.

This lunch & learn will take place on **Tuesday, January 12th from 12:00 p.m. to 2:00 p.m.** at Stanford University – CIFE Room (Room 292) of the Jerry Yang & Akiko Yamazaki Environment and Energy Building (Center for Integrated Facility Engineering). Lunch will be provided.

This event is anticipated to reach full capacity. It is encouraged that you register as soon as possible. There will be a waiting list for those who RSVP after the Lunch and Learn has been completely booked.

If you would like to know more about EnergyPlus, visit: <http://buildings.energy.gov/energyplus>.

For more information about Bentley's Energy Performance Series, visit: <http://www.bentley.com/green>.

Event Details

What: [Lunch and Learn: Bentley Hevacomp and EnergyPlus: Going beyond green to truly high performance buildings.](#)

Who: Dru Crawley, U.S. Department of Energy
Noah Eckhouse, Bentley Systems, Inc.

Where: Stanford University
CIFE Room (Center for Integrated Facility Engineering) – Room 292
The Jerry Yang & Akiko Yamazaki Environment & Energy Building
473 Via Ortega, Room 292, MC:4020
Stanford, CA 94305-4020

[Directions](#)

When: Tuesday, January 12, 2010
12:00 p.m. to 2:00 p.m.

2009 - 2010 Event Calendar

<i>Date</i>	<i>Venue</i>	<i>Presentation Topic</i>	<i>Speaker(s)</i>
Thursday, January 7 5:30 to 9:00	Scott's Seafood, Oakland	ASHRAE/USGBC/IESNA Standard 189.1 for High- Performance Green Buildings	Kent Peterson, P2S Engineering
Thursday, February 4 5:30 pm - 9:00 pm	Scott's Seafood, Oakland	Getting to Zero: Lessons Learned from Designing Net Zero Energy Building	Brad Jacobson EHDD Architects
Thursday, March 4 5:30 pm - 9:00 pm	Sausalito Yacht Club, Sausalito	Joint meeting with Redwood Section Water Reclamation, Conditioning & Conservation-Rainwater, Graywater, Reverse Osmosis, Deionization	Brian Soderholm Water Control Corporation
Thursday, April 1 DeYoung Museum	TBD	Presentation of the Arup Design and Building Tour	Ray Keane Timmons Design Engineers, formerly with ARUP
April Tech Tour		TBD	TBD
Thursday, May 6	PG&E Pacific Energy Center, San Francisco	Showcase/Tech Awards/Student Science Fair	Vendors and Award Recipients
Thursday, June 3 5:30 pm - 9:00 pm	Scott's Seafood, Oakland	Targeting Net-Zero- Energy/Zero-Carbon- Emissions (Z2).	Peter Rumsey, Rumsey Engineers David Kaneda, Integrated Design Associates

TBD = To Be Determined

Visit www.ggashrae.org/calendr.htm for updates, presentation summaries, speaker biographies and to register for the meetings. If you have suggestions for meeting topics, please contact Scott Wayland at sewayland@comcast.net

Photos

