

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XLIV - NUMBER 4

JAN 2006

January Meeting Details

This month's meeting is a ***lunch*** meeting, on the ***second*** Thursday of the month, and is the joint meeting with the San Francisco AIA.

Date: Thursday, January 12, 2005

Place: The Carnelian Room
52nd floor, 555 California Street,
Bank of America Building, San Francisco.
Take an express elevator from the Montgomery
Street entrance level to the 52nd floor.
415-433-7500

Schedule:

11:30 AM – noon: Registration and social hour
Noon – 12:40 PM: **Lunch** with announcements
and introductions
12:40 – 12:45 PM: Break
12:45 – 1:30 PM: Main presentation

Cost: \$40 for Golden Gate ASHRAE and San
Francisco AIA members and guests reserved by
Thursday, January 5 at noon.

Students – No charge, but please reserve a spot.

\$47 for non-members and late reservations/at
the door for members.

\$50 for late reservations/at the door for non-
members

Please make your reservation via our website. Visit the
Event Calendar at

<http://www.ggashrae.org/calendr.htm>, click January
12, and fill out and submit the form. Or fax the form
on page 8 to Jeff Blaevoet at 415-625-0735.

Remember – if you make a reservation and cannot
attend, you need to cancel in advance, or you will be
billed.

January Program

Review of the 2005 Title 24

Charles Eley, FAIA, PE
Architectural Energy
Corporation



Mr. Eley will review recent changes to the California building energy efficiency standards (Title 24) and discuss how the standards are a key element in California's energy policy. Recent changes, since the electricity crisis of 2001, include more stringent fenestration requirements, tougher lighting standards, HVAC control and equipment requirements, restrictions on outdoor lighting, and a shift from source energy to TDV energy as the currency for evaluating energy performance. Mr. Eley will also discuss possible changes that are in the works for the 2008 standards.

Charles Eley Biography

Charles Eley, FAIA, PE is an architect and mechanical engineer with 25 years experience in energy efficient and sustainable design. Mr. Eley was the prime contractor to the California Energy Commission (CEC) for the 1992, 2001, and 2005 updates to the California building energy efficiency standards (Title 24). He is currently working with the CEC for the 2008 update. In addition to California, Mr. Eley has made significant contributions to energy standards in Hawaii, Guam, Samoa, Palau, Australia, Hong Kong, and India. Mr. Eley is the technical editor and author of the ASHRAE User's Manual for Standard 90.1, the Advanced Lighting Guidelines, the CHPS Best Practices Manuals, and numerous other technical documents. He is vice president of Architectural Energy Corporation, with offices in San Francisco, Boulder and Chicago.

Golden Gate Chapter President's Message, January 2006

Happy New Year everyone! I hope your holidays were safe and truly memorable. This month's president's message is about keeping things in perspective. Having just returned from my honeymoon before the holidays, I've had plenty of time to rest and to be with family over the past few weeks. This has been one of the most restful times of my career, and it was wonderful. This time of leisure and family has reminded me how important and enjoyable it can be to take an occasional break from our busy work schedules.

Certainly we are fortunate to work in an industry (and geographic area) that is experiencing a high level of business activity. Several barometers indicate that this trend will continue through the coming year and beyond. Let's meet the challenges of our demanding professional lives and make time for whatever else you consider important: family, religion, recreation, rest, community, volunteerism, etc.

Sometimes it may seem easier said than done to get away from deadlines and projects at work. With e-mail, mobile phones, and the Internet, we may feel "connected" to the office 24 hours a day. If we can use these tools to maximize our professional productivity while keeping in perspective the other priorities in our lives, I believe we have succeeded. While it will not be easy, this year try to schedule some time away from work and plan to focus your energy on another important part of your life. When you return to work after a well-deserved break, you'll be more effective and enthusiastic than you thought possible.

Our Golden Gate Chapter always has great attendance at the annual January lunch meeting, <http://www.ggashrae.org/calendr.htm>. I hope to see you at the Carnelian Room for Charles Eley's presentation on the 2005 edition of Title 24 energy standards. Note that this will be a joint meeting with the San Francisco Chapter of the AIA, so we should enjoy seeing some new faces among our group.

Well, as I said, I've been away from the office for a while. Now it's time for that less-than-pleasant task of sorting through e-mails. But you know what? It was worth it!

*Respectfully submitted,
Cory Palmer, Chapter President*

Change of Address?

All members who wish to make changes in their membership data (change of email address, change of address or change of employer are the most common) must make those changes through the national ASHRAE site <http://www.ashrae.org>.

THE GOLDEN GATE CHAPTER CANNOT MAKE THESE CHANGES FOR YOU

In order to change your membership data, you will need your ASHRAE member number and confidential PIN number, both of which are on the ASHRAE card issued to you each year. Go to the Change of Address link of the ASHRAE website, log in, and then go to Membership Records. If you don't have your PIN or membership card, please call Customer Service: 1-800-5-ASHRAE (US and Canada).

UC Extension Courses Spring 2006

This Spring (2006) two core courses for the HVAC/R Certificate program co-sponsored by UC Berkeley Extension Service and the Golden Gate Chapter of ASHRAE will be offered in San Francisco. X470 HVAC Ductwork and Piping Systems and X473 Temperature Controls for Heating and Air Conditioning Systems. Both courses will be offered at the UC Berkeley Extension Service classrooms at 425 Market Street (at Fremont Street). This classroom is conveniently located near the Embarcadero BART and MUNI stations.

Registration and details for each of these classes and the certificate program can be obtained from the links below:

[X470 HVAC Ductwork and Piping Systems class](#)

[X473 HVAC Control and Energy Management Systems class](#)

[Information on the HVAC/R Certificate Program](#)

Golden Gate Chapter Spring Seminar—save the date!

Duct Leakage in Commercial Buildings

The State of California currently requires homes with new equipment to have tight ducts, but duct leakage in commercial buildings can be even more important than in homes. A large portion of fan power is currently wasted via leakage in supply, return and exhaust ducts because air is not going where it is intended. The Golden Gate Chapter's 2006 Annual Seminar will focus on such problems and what you can do about them.

This year's speaker will be Mark Modera of Carrier-Aeroseal, the division of Carrier that focuses on duct leakage problems and how to solve them. Mark is a Ph.D. Mechanical Engineer and invented the Aerosol sealing technology while an employee of the Lawrence Berkeley National Laboratory. In addition to discussing duct sealant technologies he will talk about other air flow issues and measurement techniques.

This all day seminar will take place at the Pacific Energy Center in San Francisco from 8 am to 4 pm on Friday, April 28, 2006. Stay tuned for more details in next month's *Fog Dispenser*.

Chapter Technology Transfer Committee (CTTC)

Scott Wayland, ASHRAE Golden Gate CTT Committee Chair

Please check out the committee website at <http://ggashrae.org/cttc> and the past *Fog Dispensers* for more information. Society's Technology Transfer page is just one of many outstanding improvements recently to the national website. Check it out!!! <http://www.ashrae.org/template/AssetDetail/assetid/25424>

CTTC Issue Update Newsletter from Society

The following is a link to the latest CTTC Newsletter: [CTTC Issue Update 2005-2006](#)

Technology Awards

Technology Awards are due at the end of February. If you want to submit, may I suggest you do the following before the end of the year:

- Contact your project's owner to discuss the Award now so they can have time to approve your participation.
- Start working on an application, print out all the info below and see what's involved. If you ask any of the recent winners they will tell you it's not a huge effort, just don't wait until the last minute because then you will not be able to prioritize the submission over your actual project responsibilities.

The 2006 Society Technology Award results were finalized in October. After several years of amazing results at the Society competition, Region X and Golden Gate was left out this year unfortunately. The results are here: <http://ggashrae.org/cttc/2006winners.htm>

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

[Technology Awards Program](#)

[Sample Technology Award Entry](#)

[Chapter/Regional Application -- Short Form](#)

[Society Level Application -- Long Form](#)

Join the CTT Committee

We hope you can join us at the next meeting and see me if you like to assist the chapter and the CTT committee or contact me at sewayland@comcast.net

Happy New Year!

From the Chapter Historian

Carl H. Jordan, Life Member/Fellow and GGASHRAE Historian

ASHRAE Research – a Testimonial

At the ASHRAE meeting in Dallas, in February 1960, ASHRAE researchers N. Ozisik and L.F. Shutrum presented a paper entitled “Solar heating gain factors for windows with drapes.” Their data was based on nine drapery types with three glass types and with different drapery “fullness” (number of folds). The testing was done using a solar calorimeter at the ASHRAE Lab in Cleveland, Ohio. They measured transmittance, absorption and, by deduction, reflectiveness at different angles of solar incidence. Their paper later appeared in the June 1960 *ASHRAE Journal*.

I had been with Buonaccorsi & Murray, San Francisco Consulting Engineers, for 2½ years at that time, when Joe Murray (President Golden Gate Chapter, ASHVE, 1953-1954) asked me to prepare cooling loads for an existing mini-high-rise in San Francisco. The building HVAC system was in dispute.

I had all of the data I needed except the drapery “solar heat going factor” (SHGF) and shading factor (SF). But, I did have a sample of the drapery in question. So, after contacting Ozisik and Schutrum at ASHRAE, they agreed to test my drapery in their solar calorimeter. They did so and presented their data for a San Francisco latitude and, among other dates and times, March 22 and noon solar time (the building’s glass had significant eyebrow overhangs; therefore the maximum solar load was at noon in March).

I still have their test results in their July 7, 1960 report.

What service from our own ASHRAE research efforts!

(Information from author’s memory and records)

Meeting Student Sponsors

Remember, anyone can sponsor a student at a meeting! It’s easy to do and is a great opportunity to meet the next generation of engineers. We request students and sponsors sit together to enhance the networking opportunities.

2005 - 2006 Event Calendar

<i>Date</i>	<i>Venue</i>	<i>Presentation Topic</i>	<i>Speaker</i>
Thursday, Jan 12 Lunch, Joint Meeting with the San Francisco Chapter of the American Institute of Architects	Carnelian Room, S.F.	Title 24 – 2005	Charles Eley, Architectural Energy Corporation
Thursday, Feb 2, 2006 Student Night	Scott's Seafood, Oakland	Controls / Retro- Commissioning (Tentative)	David Sellers, PE, Portland Energy Conservation, Inc. (PECI)
Thursday, Mar 2 Joint Meeting with Redwood Empire Chapter	Embassy Suites, San Rafael	HVAC Design Tools	John Kennedy, Green Building Studio, Inc.
Thursday, Apr 6, 2006 Product Show and Student Awards	Pacific Energy Center, SF	Product Show and Student Night and Science Fair award winners	Various
Friday, April 28, 2006 Spring Seminar	Pacific Energy Center, SF	Duct leakage in Commercial Buildings	Mark Modera, Carrier-Aeroseal
Thursday, May 11, 2006 Lunch/Field Trip	California Culinary Academy	Tour of the new naturally ventilated high-rise San Francisco Federal Building	
Thursday, Jun 1 Spouses Night	Carnelian Room, S.F.	Spouse and Significant Other Night	General Interest Speaker: TBD

Marble Draw

Thanks again to all the companies that donated a raffle prize for the December joint chapter meeting. Sponsors were: Silicon Valley Mechanical, Taylor Engineering, Norman S. Wright Mechanical, Syserco, Air Treatment, Siemens, Therma, Acutherm and Fafco.

Congratulations to Edgar DeGuzman of ACCO who won the Marble Draw at the December meeting.

If you would like to donate a raffle prize for a future meeting please contact Becky Carta at 415-407-5726 or bcarta@norman-wright.com.

Minutes of GG Chapter Meeting December 8, 2005

Marriot Hotel, San Mateo

- The pre-dinner speaker, Verle Williams, presented “Virtual Chiller Plant” at 5:00 pm.
- The meeting started at 6:30 pm with dinner.
- Following dinner were self-introductions by members and guests of the Golden Gate and San Jose Chapters.
- Golden Gate President Cory Palmer started the announcements at 7:15 PM.
- Cory asked for a motion to approve the minutes of the November 3, 2005 meeting, which was made, approved and seconded.
- Cory recognized the following individuals:
 - Scott Wayland for CTTC Chair
 - Kirk Peterson for Golf chair
 - Therese Peffer for the Fog Dispenser
 - Max Sherman for Seminar Chair
 - Amy Cervantes for Membership Chair
 - Gary Harbison for Student Activities Chair
 - Jon Wintermeyer for Past President
- Cory made an announcement about the Spring 2006 seminar, which will be “Duct leakage in Commercial Buildings” by Mark Modera.
- Jon Thompson, President of the San Jose Chapter, made an announcement regarding the upcoming Campbell Brewery Tour.
- Verle Williams, ASHRAE Region Ten DRC, made a brief announcement on Regional Ten affairs.
- Cory introduced the featured speaker, Jan Sundell, who made a presentation on indoor air quality.
- Becky Carta did the Marble Draw at 8:45 PM.
- The meeting adjourned at 9:00 PM.

Minutes by Jeff Blaervoet

ASHRAE Golden Gate Chapter – Dinner Reservation Fax

For Thursday, January 12th

Please reserve prior to Thursday, January 5th at noon.

Please reserve on-line by visiting <http://www.ggashrae.org/calendr.htm>, click on January 12, fill out the form and submit. Or FAX this page to Jeff Blaevoet at 415-625-0735.

Members with vouchers – you too must send in your reservation. We need to know how many meals to request. Please cancel your reservation if you cannot attend.

FROM: _____
COMPANY: _____ Phone: _____
Please make _____ reservation(s) for the following people (fill in names below):

Pay for meetings using your credit card

The Chapter has set up a PayPal account. You may now pay for your meetings using your credit card if you have a PayPal account. It's a very simple process, and the instructions are on the website.

- There will NOT be any service charges to you from PayPal nor the Chapter.
- The Chapter does NOT see your private card nor bank information.
- The Chapter does NOT even see the last four digits of your credit card number.
- You can cancel your personal PayPal account whenever you want.

NOTE: At the meeting, we will have a list of those that have paid through PayPal, but we will not be accepting credit card payments at the meeting. All credit card payments MUST go through PayPal. If you want to pay at the meeting, it's business as usual...cash or checks only.

Photos from Golden Gate chapter December meeting



Left: ASHRAE members discussing the evening and catching up with each other.

Right: Gary Harbison and Bob Levi



Left: Joint dinner event with the San Jose chapter

Right: President Cory Palmer presents a certificate to Gary Harbison for Student Activities.



Left: President Cory Palmer presents a certificate to Past President Jon Wintermeyer.
Right: President Cory Palmer presents a certificate to Scott Wayland for CITC.



Left: President Cory Palmer Watches Becky Carta and the Marble Draw Winner Edgar DeGuzman.

Right President Cory Palmer with Speakers Verle Williams and Jan Sundell

