Volume 41, No. 9
May 2006

Quaker City CLIMATE
JOURNAL OF THE PHILADELPHIA CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS, INC.

PHILADELPHIA CHAPTER

Pre-Dinner

Humidity Control
presented by
Kevin Cole
Stulz-ATS, Inc.

After-Dinner

IBC Seismic Compliance
presented by
Richard C. Berger
SGMEC Group

Thursday, May 11, 2006

5:00 to 5:45 PM
Pre-Dinner Presentation

5:45 to 6:15 PM
Cocktails and Hors D'ouevres

6:15 to 7:00 PM
Dinner

7:00 to 7:45 PM
After-Dinner Presentation

7:45 to 8:00 PM
Conclusion

FIELD TRIP
Wednesday, May 10
6:00 PM

Princeton University Cogen / TES Plant
See page 3 for details.

STRENGTHEN OUR MEMBERSHIP!

****

Ask for a Membership Application at our Events' Reception Table - Pass it along to a Friend or Colleague!

LOCATION

Colleen's on the Parkway
Parktowne Place Apartments
South Building
22nd & Ben Franklin Parkway
Philadelphia, PA

Valet parking is available at the restaurant entrance, courtesy of the Philadelphia Chapter.

FOR RESERVATIONS

Call (610) 971-2169
or Email
philachapter@mail.ashrae.org

RESERVATION NOTICE

Reservations must be made by no later than 12:00 Noon 2 days prior to the meeting date.

COSTS

Local Chapter Members Reservation
$30
Late Registrations & Walk-ups
$45
Non-local Dues Paying Members
$35
Members 30 years & under
$10 Discount

Student Members
$10

Reservations not cancelled by 12:00 noon 2 days prior to the meeting date will be billed the full amount. The Chapter will no longer bear the cost of "no-show" meals.

Pre-Dinner Presentation

The Importance of Humidity Control

Humidification Technologies

Psychometrics
- Adiabatic Humidification
- Isothermal Humidification

Humidity Control

Humidification Applications

Energy Considerations

Dehumidification Technologies

Desiccant Dehumidification

Refrigerant/Mechanical Dehumidification

Dehumidification Control

Dehumidification Applications

Energy Considerations

Pre-Dinner Speaker

Kevin Cole

Kevin Cole is Sales Manager at Stulz Air Technology Systems, Inc. He has worked in the precision environmental control industry for over 20 years and has extensive experience in air conditioning, humidification and dehumidification control.

He has been responsible for world wide design and development of products for the "Tactical Applications Group" specializing in systems to control temperature and humidity where extreme climatic conditions exist.

Kevin's present responsibilities include engineering product coordination on major projects with Fortune 500 Companies and technical presentations to consulting engineering firms and high tech professional organizations.

After-Dinner Presentation

IBC Seismic Compliance – For Emergency & Essential Components, Use Group IV, IBC-2003

We will begin with highlights of the International Building Code Sections 16 and 17 and review the responsibilities, liabilities and details for all project designers and manufacturers participating in projects in this category. Highlighted will be Use Group III construction, IBC-2000 and Use Group IV, IBC-2003-2006. Included are hospitals and medical facilities having surgical or emergency treatment, emergency schools, municipal complexes and the extended requirements for components that utilize gas including certain refrigerants. We will also review some information pertaining to interaction between the structural, architectural and MEP designers.

Next we move to a visual demonstration of what a Manufacturer's Certification Program actually looks like and the Engineer's & Contractors Quality Assurance Program which must follow it including Special Testing & Inspection, as outlined in chapter 17.

Finally, time permitting we will conclude with a review of what project management from a design perspective should be.

Questions and answers can follow or occur as we go.

After-Dinner Speaker

Richard C. Berger

Richard C. Berger, through his SGMEC Group, is a frequent lecturer and author on Seismic Building Codes for non-structural building components in many states. He is a certified AIA/CES Registered Provider and his multi-state "Seismic Guidebook" is used by building code officials and industry designers alike. His articles appear in many industry publications. He has also designed and patented a series of products which are industry standards.

Mr. Berger is Chairman of the VMC Group, Vibration Mountings & Controls, Inc., Korfund Dynamics and Aeroflex International Isolators, manufacturers of seismic, shock, isolation, noise and bomb-blast protection products.

PHILADELPHIA CHAPTER ASHRAE
2005 - 2006 PROGRAMS

For reservations and updates, check www.ashrae-phila.org.

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Thursday May 11	Colleen's	Humidity Control	IBC Seismic Requirements	ASHRAE Scholarship Night
Wednesday May 10	Princeton University Campus	Centralized Thermal Energy Storage	Tour of New TES Plant	Field Trip
Thursday June 8 5:30 pm	Temple University Campus	Program Planning Meeting for 2006-2007		

May 10 Field Trip to Princeton University Cogen / TES Plant

Our tour will be hosted by the Princeton University's Energy Plant Manager, Ted Borer, PE, CEM, LEED. Princeton University has a daytime population of approximately 10,000 people: half students and the remainder a combination of researchers, faculty, and staff. The university has been providing power since 1996 to its 500-acre campus with a gas turbine. The turbine produces 70 to 85 percent of the electric power required by the campus all year, and the hot air of the exhaust is harnessed to produce steam in a process called cogeneration (cogen). The university minimizes their peak electrical demand for making chilled water with a large scale thermal energy storage plant.

Our group will meet at the Princeton campus on **Wednesday, May 10, at 6:00 PM** at the Frist Campus Center, Room 205. The Frist Campus Center is on Washington Road, which is an exit on Route 1 (S) and is also a turn off Route 27. A light meal will be provided at no cost to attendees.

Contact Hope Silverman at 610-971-2169 or philachapter@mail.ashrae.org to register for the tour.

We Need More Reservations!

We need your attendance!

We are below our guaranteed level for ASHRAE members and our treasury could be negatively effected. Our programs are designed around the membership's input and we all need to support these meetings to maintain a strong/informed association.

We hope to see you at our next meeting.

Please come out and support our Chapter!

ASHRAE Volunteers are Needed

Can you spare a few minutes a month to help on one of the following committees for the Philadelphia Chapter?

Membership Promotion Committee
Program Committee
Research Promotion Committee
Refrigeration Committee
Technical, Energy & Government Activities Committee
Student Activities Committee

Please send an email to our Volunteer Chairman, Bob Carpenter, at bob@cowardenvironmental.com to identify your interests to participate.

We Need Your Email Address!

The Quaker City Climate, the monthly newsletter of the Philadelphia Chapter of ASHRAE which is published September through May, is now distributed only by email, unless a Chapter member contacts our office and specifically asks that they continue to receive a hard copy by mail.

This is a cost savings for the Chapter and eliminates lost time due to mail delays. This is also useful to distribute meeting reminders and urgent information in a timely manner.

Don't miss the latest information on meeting dates, locations, and speakers, as well as other news of interest to engineers in the Philadelphia area!

Please email us at hope@multiservicemgmt.com to be added too our email distribution list, if you are not included already.

We will keep your email address confidential!

Student Activities

Over the next couple months, the Student Activities Committee will be attending local colleges to promote ASHRAE. Some of the colleges include Drexel, Temple, Widener, and Delaware Valley Community College. We are also looking to set up visits to local grade schools and or high schools. If you have any interest in presenting or getting involved, please contact Mike Witkowski, Student Activities Committee Chair, at mwitkowski@mchugheng.com.

ASHRAE SCHOOL COORDINATOR

Position Available for Academic Year 2006-07

- Manage the Basic and Advanced Classes which run from September to April
- Initial assistance from previous coordinator, Larry Snyder
- Advertise courses, contract the class location, interview and select the instructors
- Determine the order and schedule of content for both courses
- Register students (~ 20 in Basic and ~ 10 in Advanced) and collect payments
- Develop computer database of instructors and students
- Submit invoices to pay instructors
- Opportunity to teach your specialty in the Basic or Advanced class
- Salary commensurate with part-time professional in education
- Contact Steven Ridenour, ASHRAE Philadelphia, 215-204-8825, steven.ridenour@temple.edu

05-06 Directories Available

The 2005-2006 Directory of Consulting Firms and Manufacturers' Representatives in the Philadelphia Area is now available for $20 each. To order your copy, send your check, payable to "Philadelphia Chapter ASHRAE", to:
994 Old Eagle School Road, Suite 1019,
Wayne, PA 19087-1866.

Check
www.ashrae-phila.org
for further information
on the
Philadelphia Chapter!

APRIL MEETING PHOTOS



Ken Strup, Chapter President, receives a Society Certificate of Appreciation for Service to the Philadelphia Chapter from President-Elect Steve Piccolo.



Jay Halsey receives "Pit Bull Dog Award" for outstanding local fundraising for the ASHRAE Research Program from Steve Piccolo.



Steve Piccolo gives a Liberty Bell to speaker Charlie Waddell of Bioclimatic Air Systems.

ASHRAE IAQ 2007 Examines Healthy, Sustainable Buildings

Healthy, sustainable buildings are those that create high quality indoor environments while minimizing their impacts on the outdoor environment. But achieving both can be a challenging goal.

Guidance on how to do so will be presented at the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) conference, IAQ 2007 Healthy and Sustainable Buildings, which will be held Oct. 15-17, 2007, at Baltimore's Inner Harbor, Baltimore, Maryland.

"The issues of healthy and sustainable buildings are cyclical and interdependent," Lawrence J. Schoen, P.E., chair of the conference said. "Buildings not only impact the indoor environment but they have an impact on the outside environment. Our goal in creating healthy buildings should be to create indoor environments where people are healthy and productive but that minimize impact on the environment."

The conference will emphasize the measured performance of healthy and sustainable buildings and practical methods for their design, construction, operation and maintenance, according to Schoen.

For more information, contact ASHRAE Technical Services at IAQ2007@ashrae.org or www.iaq2007.org.

PHILADELPHIA ASHRAE CHAPTER ANNUAL SPRING GOLF TOURNAMENT



WHEN: **Friday, June 2, 2006**
1:00 pm Shotgun

WHERE: **Northampton Valley Country Club**
Richboro, PA (near I-95 and Newtown-Yardley Exit)

COST: **Golf & Dinner: $ 90.00 / Per Person**
Dinner Only: $ 40.00 / Per Person

Prizes include First, Second and Third Place Awards plus Longest Drive and Closest to the Pin Awards.

* Scramble Format *

SINGLES AND FOURSOMES ARE WELCOME!

RSVP TO:
Brett Jenner
Tel: 215-641-4276
Fax: 215-641-4310
Email: brett.jenner@honeywell.com

PAYMENT TO:
ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
(Make checks payable to "Philadelphia Chapter ASHRAE")

REGISTRATION FORM

Name:	Company:	Telephone:

Golf and Dinner **$ 90.00 x _____ = _____**

Dinner Only Option **$ 40.00 x _____ = _____**

Hole Sponsor **$ 200.00 = _____**

Multiple Hole Sponsor **$ 150.00 x _____ = _____**

TOTAL ENCLOSED **$_____**

ASHRAE

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC. PHILADELPHIA CHAPTER

BASIC HVAC SYSTEM DESIGN COURSE

This is a demanding one-year course that introduces students to the fundamentals of HVAC design. Classroom activities will include lectures and problem solving sessions, supplemented by home reading and study assignments.

2006-2007 Course Subjects Include:

Fundamentals and Psychometrics

Load and Heat Transfer Fundamentals

Load Calculations

Pumps, Piping & Piping Systems

Basic Steam & Boilers

Electricity Fundamentals

Fans, Air Distribution & Duct Design

Refrigeration

Controls & Instrumentation

Equipment Selection

The class is a great way to further, or even begin, a career in HVAC.

Classes will meet Tuesdays and Thursdays from 6:15 PM to 8:30 PM beginning in early October and continue until the end of April. All classes will be held in Philadelphia.

The Basic Class tuition is $1,000.00, which includes all reference materials. Class size is limited to 30 students, so complete the enclosed application making sure to check the **BASIC** course box and include it with a **non-refundable** deposit of $200.00 payable to "Philadelphia Chapter ASHRAE". Balance due at first course session. Please mail the application and deposit to the School Coordinator at:

Hope Silverman
Philadelphia Chapter ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
P: 610-971-2169 F: 610-971-4859 E: philachapter@mail.ashrae.org

ASHRAE

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC. PHILADELPHIA CHAPTER

ADVANCED HVAC SYSTEM DESIGN COURSE

Through this challenging course, students will use architectural building backgrounds to develop a complete HVAC system. Design concepts will encompass air systems, chilled and hot water hydronic systems and equipment selections such as chillers, boilers and unitary rooftop. The schedule is a demanding one-year, 28-night course culminating in a student generated total system design. Additionally, there are plenty of out-of-class assignments to help students manage their workload.

This course is fantastic opportunity to develop the tools necessary to further an HVAC Career.

2006-2007 Course Subjects Include:

Code Evaluation
Load Calculation
System Evaluation & Selection
Equipment Selection
Layout
Controls
Specifications

Classes will meet Wednesday evenings from 6:15 PM to 8:45 PM beginning early September and continuing until the end of April. They will be held at Sheet Metal Workers Local 19 located at 1300 Columbus Blvd. in Philadelphia.

The Advanced Class tuition is $1,000.00, which includes all reference materials. Class size is limited to 25 students, so complete the enclosed application making sure to check the **ADVANCED** course box and include it with a non-refundable deposit of $200.00 payable to "Philadelphia Chapter ASHRAE". Those applications not accepted for enrollment will have the deposit refunded. Balance due at first course session. Mail the application and deposit to the School Coordinator:

Hope Silverman
Philadelphia Chapter ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
P: 610-971-2169 F: 610-971-4859 E: philachapter@mail.ashrae.org

Philadelphia Chapter ASHRAE

American Society Of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Continuing Education Application

I am applying for: ____ **Basic HVAC Course** ____ **Advanced HVAC System Design Course**

Personal Information

Name: _____
Last First M.I.

Home Address: _____
Street City State Zip

Phone No.: _____ Date of Birth: _____ Application Date: _____

Email: _____

Current Employment

Employer: _____ From: _____ To: _____ Total _____
Firm Name Date Date Years

Business Address: _____
Street City State Zip

Job Title: _____ Phone: _____ Fax: _____

Email: _____

Discipline: _____ Engineer _____ CAD/Designer _____ CAD/Drafting _____ Sales Rep _____ Trades _____ Administration

Employment History

Firm	Location	Job Title	No. Years

Total years in the HVAC industry: _____

Education

	School (Name & Location)	Years Attended	Major	Degree Or Diploma
High School				
College				
Other				

If applying for the Advanced Course, have you completed the Basic Course? ____ No _____ Yes Year Graduated: _____

PLEASE SEE REVERSE SIDE FOR PAYMENT

PAYMENT

AMOUNT:

Basic Course _____ $200 Deposit _____ $800 Balance Due _____ $1000 Fee

Advanced Course _____ $200 Deposit _____ $800 Balance Due _____ $1000 Fee

PAYMENT BY CHECK: _____ (made payable to "Philadelphia Chapter ASHRAE")

PAYMENT BY CREDIT CARD: ____ VISA ____ Master Card

Please note: Payment by credit card requires an additional 5% processing fee unless the full fee is being paid prior to the beginning of course.

Total Amount to be Billed to Card: _____

Credit Card Number: _____

Expiration Date: _____

Name on Card (please print): _____

Billing Address for Card: _____

_____

_____

RETURN THIS FORM WITH PAYMENT TO:

Hope Silverman
Philadelphia Chapter ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
P: 610-971-2169 F: 610-971-4859 E: philachapter@mail.ashrae.org

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For Official Use Only

Date Received: _____ Tuition: _____ Deposit: _____ Check No.: _____ Balance _____

Please help the ASHRAE Research 2005-2006 Fund Drive by filling out this Donor Form and sending it to national headquarters in Atlanta this week. Have you asked your company if they have a matching gift program? Remember every dollar you donate to this worthy cause is doubled by ASHRAE Society! If you have any questions, please contact Steve Ridenour, Research Program Chairman, at steven.ridenour@temple.edu.

ASHRAE RESEARCH - Donor Form
Philadelphia Chapter 21 - Region 3

1) Type of Contribution;

O Individual
O Corporate
O Memorial To: _____
Please attach the details for the acknowledgement to, relationship to, and addresses.

2) Level of Contribution;

O Golden Circle ($10,000 and greater)
O Research Partner ($5,000-$9,999)
O Research Associate ($2,500-$4,999)
O Research Major Donor ($250-$2,499)
O Research Honor Roll Donor - Individual ($100-$249)
O Research Honor Roll Donor – Corporate ($150-$249)
O Research General Donor (Less then $100 Individual/$150 Corp.)

3) Method of Payment;

A) Attach Check (Payable to "ASHRAE Research")
Please note on check "Phila- Chapter 21"
B) Credit Card
O-Visa O-Master Card O-AMEX
Date:_____ Signature: _____
Card #: _____ Exp. Date: _____

Note: All contributions are fully deductible under section 170 of the IRS code.

4) Donor Information:

Name: _____
Member # (If ASHRAE member): _____
Corporation Name (If Corp. Donation): _____
Address: _____
_____
_____
_____
Phone: Home: _____ Business: _____
E-Mail: _____

5) Send this completed form to: ASHRAE RESEARCH, 1791 Tullie Circle, NE, Atlanta, GA 30329

!! NEW !!
AFFILIATE MEMBERSHIP GRADE

For an Annual Dues of $40, Applicants under Age 30 can Join ASHRAE at this introductory membership level. Membership tenure in this grade is limited to three (3) years.

Affiliate Members Benefits Affiliate Members receive monthly issues of the ASHRAE Journal and Insights Newsletter. The annual handbook is not a benefit of this grade.

Qualifications

An Affiliate Member shall have the same qualifications as an Associate Member. They are:

1. Experience in technical matters or in design, operation, or maintenance in heating, refrigerating, air conditioning, or ventilating fields.

2. An interest in the in the advancement of the Society's aims.

3. Possess sufficient qualifications to cooperate with heating, refrigerating, air conditioning, or ventilating engineers in the advancement of relating to heating, refrigerating, air conditioning, or ventilating engineering and its application.

Limitations

- You do not receive ASHRAE Handbook with membership. You do not receive *ASHRAE Insights*. You get a one-time discount (20% off) on all Handbook items.
- You can serve on Chapter committees, but cannot hold office or vote at Chapter, Regional or Society level.

Contact For Receiving Application

Go to www.ashrae.org and click on "Join" in the upper right corner. This will take you to a page describing each membership grade, its benefits and qualifications, and a link to membership application forms.

MEMBERSHIP ADVANCEMENT!

Any Associate Member meeting the following requirement can apply for Advancement to the more entitling Member grade. By ASHRAE society definition:

A *member* shall have the equivalent of *twelve society-approved years of experience* composed of an approved combination of: (a) completed education beyond high school, (b) work experience, and (c) professional engineering or related registration or license issued by a legally authorized body.

All technical and scientific education shall be based on curricula approved by the Board of Directors.

Approved engineering curricula shall be equivalent to the accredited by the Accreditation Board of Engineering and Technology in the United States of America or the Canadian Engineering Accreditation Board. Scientific education in fields other than engineering shall be from a college or university course of study that has been accredited by an organization charged with monitoring standards of performance. *Society approved years of experience shall be credited as follows*:

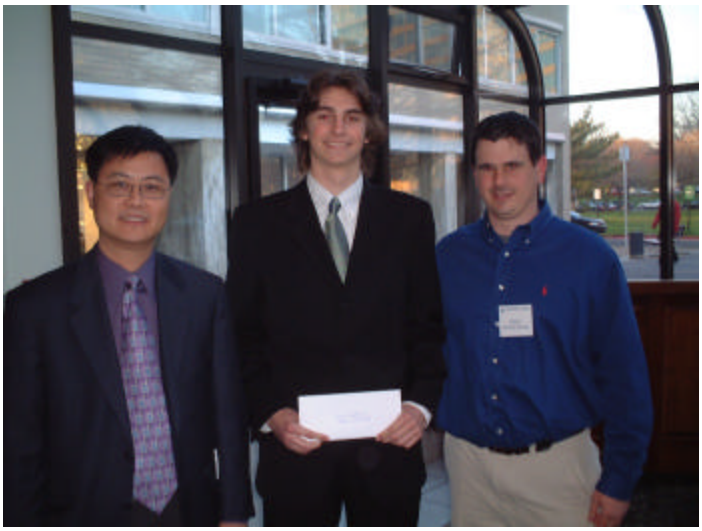
One and one-half years of credit for each year of completed education for graduates of approved technical curricula. One year of credit for each year of education for non-graduates who have completed a least two years of approved technical curricula. One year of credit for each year of completed education for graduates of colleges or universities which do not have accreditations. Those holding associated degrees from technical institutions shall also be credited for one year for each year of education.

One year for each year of qualifying work experiences in the performance of duties in work related to ASHRAE fields of interest and shall have included research, teaching, design, contracting, engineering sales or engineering management.

Three years of credit for professional registration of license issued by a legally authorized body in engineering or related fields, the requirements of which as to education, examination, and active practice are satisfactory to the Board of Directors.

More information is available on the ASHRAE website (www.ASHRAE.org) under menu items Membership Resources…Manage Your Membership, the above definition is extracted from such application information in PDF file format. The application can also be filled interactively online. ASHRAE sends members who upgrade a $20 gift certificate usable at the ASHRAE bookstore or towards ASHRAE membership renewal.

Otto Gesner Scholarship Winners



Scholarship winner Jason Makdinas, Widener University (center) with Dr. Zhongping Huang, Widener University Student Advisor (left), and Mike Witkowski, Philadelphia Chapter Student Activities Committee Chairperson (right).



Scholarship winner Lisa Chen, Drexel University (right) with Mike Witkowski, Philadelphia Chapter Student Activities Committee Chairperson (left).



Scholarship winner Marwan El Mougharbel, Temple University (center), with Mike Witkowski, Philadelphia Chapter Student Activities Committee Chairperson (left) and Dr. Steven Ridenour, Temple University Student Advisor (right).



Delaware County Community College Student Advisor Paul Bentzley (center) accepts for student Keith Werner. Also present: Mike Witkowski, Philadelphia Chapter Student Activities Committee Chairperson (left) and Dr. Steven Ridenour, Temple University Student Advisor (right).

ESTABLISHED 1919

SMCA

SHEET METAL CONTRACTORS ASSOCIATION
OF PHILADELPHIA AND VICINITY

SMCA Education/ Technical Committee

SURVEY

The Education Committee of the Sheet Metal Contractors Association of Philadelphia and Vicinity is planning our annual "Engineer's Night" program. The event will be held on October 5, 2006 at the Rittenhouse. The Committee would like your assistance in planning this year's presentation.

Listed below are the topics we are considering. Please mark and rank (1-5, with one the highest), the programs that YOU WOULD LIKE TO SEE PRESENTED.

Thank you for your help!

___ **CHANGE ORDERS**

___ **UL APPROVAL OF DUCT STANDARDS**

___ **FAN PERFORMANCE**

___ **TROUBLESHOOTING SYSTEMS**

___ **"VAV" BOXES - SUPPLY, RETURN AND EXHAUST**

___ **LEAK TESTING**

___ **DESIGN vs. SHOP DRAWINGS**

___ **OTHER (please describe):** _____

PLEASE RETURN SURVEY TO:

John Connolly
SMCA of Philadelphia & Vicinity
Phone: 610-828-4055
email: jconnolly@smca.org

Join the **Delaware Valley Green Building Council** and

US Green Building Council

LEED-EB (Existing Buildings) Technical Review - Philadelphia, PA

Wednesday, June 7, 2006 - 8:30 am – 5: 00 pm

On-site sign-in and registration for the workshop begins at 8:00 a.m., and the workshop will take place from 8:30 a.m. - 5:00 p.m.

McCall Meeting & Conference Center
Windows Room
201 North Lynn Blvd.
Highland Park, PA 19082**]**

Visit the McCall Meeting & Conference Center website for information regarding directions, parking and maps.

What is LEED for Existing Buildings?

The LEED Green Building Rating System for Existing Buildings (LEED-EB) is a set of performance standards for the sustainable operation of existing buildings. The LEED-EB criteria cover building operations and systems upgrades in existing buildings where the majority of interior or exterior surfaces remain unchanged. The U.S. Green Building Council offers a full-day LEED-EB Technical Review workshop.

Faculty: Steve Piguet and John Adams
Cost: Early Registration Fees: $325 National Member and $425 Non-Member
Late Registration Fees: $355 National Member and $475 Non-Member

Register @ www.dvgbc.org Contact: Lorna Rosenberg 267-238-3894 with questions.

Please note that late registration rates take effect on Wednesday, May 31, 2006.

USGBC is now offering $150 student registration rates for full time students. For more information and to register please contact workshop@usgbc.org. (Limited spaces are available)

Optional Purchase: LEED-EB v2.0 Reference Guide ($125 with workshop registration) No exchanges or refunds will be offered for the Reference Guides.

A 486-page O&M guideline for high-performance buildings and a user's manual for the LEED for Existing Buildings Green Building Rating System (for operations and maintenance of commercial buildings). LEED-EB provides a tool for building owners, managers and practitioners to maximize the operational efficiency of their buildings while minimizing environmental impacts. The Reference Guide is essential for LEED-EB certification. Customers receive access to view the LEED-EB v2.0 Reference Guide online. To access these files online go to MyUSGBC and then to the Reference Guide Section.

Member pricing and reference package discount will be reflected once you reach the secure checkout section. If you are purchasing the reference package, please place the workshop in your shopping cart first to ensure you receive the discounted rate.

Continuing Ed. Credits: This program is worth 7 AIA/CES (HSW) LUs.

IDCEC: ASID/IIDA - 0.7 CEUs / BOMI - 7 DPDs / IFMA - 7 CFM/FMP Maintenance Points

Platinum: Anonymous Sponsor (Platinum+), Antron, EwingCole, Liberty Property Trust
Lutron, Gold: AKF Engineers, Tozour-Trane Silver: Corporate Lamp Recycling, WS Cumby & Son, LF Driscoll Co., Forbo, The Hankin Group, Hercules Cement, Interface Flooring Systems,
MAB Paints, MaGrann Associates, Mannington, Mohawk Fine Papers, Norwood, PECO Energy,
7Group, TOTO, Urban Engineers, Wallace Roberts & Todd, LLC
Weston Solutions

Member Services

Members who would like stay on top of the **latest news from ASHRAE** may join the News Release List Serve at http://www.ashrae.org/template/AboutLinkLanding/category/1584.

If you or your company are hiring, please take a moment to **review the resumés of chapter members** and students which have been posted on the chapter website at www.ashrae-phila.org/resumes.html.

Any member who wishes to **have their resumé posted on our website**, or who would like to update it, can email our webmaster, Seth Weiss, at sweiss@comcast.net. The file must be in pdf format and will be posted for 3 months.

For **Video Resume And Job Opportunities**, visit online portal: www.LookFirst.net

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Looking for work? See jobs posted at STEP, Inc. Send an updated resume to admin@step-inc.com in Microsoft Word format to be considered for any of these opportunities or to be kept posted as you are. Feel free to contact us with any questions. Keep in mind that this is a totally FREE SERVICE to any of our applicant clients. There is nothing to sign, nothing to agree to.

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1.888.AEROTEK

This is your newsletter.
We welcome your input and comments.

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994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
610.971.2169
fax 610.971.4859
ashrae-phila.org

Republication of material contained herein
is expressly forbidden without official Chapter authorization.
The Chapter does not speak or act for the Society.

Any member with material to submit for inclusion
in the *Climate* can send the information to:

Jeff Gilbeaux, PE
Gilbeaux Associates
3000 Atrium Way, #117
Mount Laurel, NJ 08054
or email: ga1engineering@comcast.net
or call: 856-231-5340
or fax: 856-273-6913

Material can include letters to the editor,
member news, upcoming events,
comments on chapter programs or issues, etc.