



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

Dayton Chapter
PO Box 3202 Dayton, OH 45401

Daylighting - Let the Sun Shine In!

William Spier, Building Solutions Technical Specialist
AEC Solutions, Autodesk, Inc.



11:30—Lunch
Main Program (1 pdh)

December 13, 2010
Engineer's Club of Dayton
110 East Monument Avenue

Cost:

Members: free
Student ASHRAE members: \$10
Non-members: \$20

Main Program: For centuries, the value of daylighting – of naturally lighting an interior, was a primary concern in architectural design. But as electrical lighting came into being, and then we entered the energy boom of the mid 20th century, that talent faded as it became easy to rely on artificial lighting. Now the world it seems, recognizes we actually have a finite supply of many resources originally though inexhaustible, and the need to be energy efficient has now become priority #1. The primary goal of daylighting analysis is the reliable evaluation of the potential of a design to provide useful levels of natural illumination. We are going to look at why that is so – namely, what the value of daylighting is, and what to expect from daylighting analysis, and we'll adduce some of the processes used to perform those analyses.

Speaker: William is an MEP Technical Specialist with Autodesk. He got his start as a plumbing designer with a consulting engineering firm in Seattle, where he worked on a high-end, national department store chain account. During his sixteen years in the industry, he has gained experience doing power and lighting, HVAC, as well as architectural design. William has worked in several disciplines within the AEC industry, including O&M design work on a major pharmaceutical account for Johnson Controls, Inc., as well as plumbing and piping design coordination for a major mechanical contractor in Kansas City where he also currently resides.

**RSVP: By Thursday, December 9, 2010, 12 noon to
Jeremy Fauber at JPFauber@heapy.com or 224-0861**

COMING EVENTS:

- ◆ Dayton ASHRAE BOG Meeting — December 16, 2010 — 8 AM
Heapy Engineering
- ◆ January Holiday Party January 22, 2011—details inside!

NOTE CHANGES TO CALENDAR, PAGE 3!

ASHRAE

2010-2011 OFFICERS

President

Rick Pavlak 224-0861
Heapy Engineering
rpavlak@heapy.com

President-Elect

Steven N. Meier 573-3072
Wat-Kem Mechanical
smeier@watkem.com

Treasurer

Jason Gillespie 513-475-3811
Elitaire
jgillespie@elitaire.com

Secretary

Gordon Schweitzer 224-0861
Heapy Engineering
GDSchweitzer@heapy.com

Past President

Jeremy Fauber 224-0861
Heapy Engineering
jpfauber@heapy.com

Committee Chairs

Membership

Greg Cohron 513-673-6664
Ramsay-Cohron
gcohron@rcme.com

History

Tom Ferdelman 224-0861
Heapy Engineering
tferdelman@ymail.com

Newsletter Editor

Lorraine Kapka 512-4501
Sinclair Community College
Lorraine.kapka@sinclair.edu

Research Promotion

Dennis Lammlein 859-6323x147
Signature Technologies
diammlein@woh.rr.com

Student Activities

Russell Marcks 512-2053
Sinclair College
Russell.marcks@sinclair.edu

CTTC

Mike Kirchens 513-475-3807 or
937-776-7304
Elitaire
mkirchens@elitaire.com

Webmaster

Russell Marcks 512-2053
Sinclair College
Russell.marcks@sinclair.edu

Board of Governors

Frank Mauro 224-0861
Heapy Engineering
famauro@heapy.com

Greg Cohron 513-673-6664
Ramsay-Cohron
gcohron@rcme.com

Lorraine Kapka 512-4501
Sinclair Community College
Lorraine.Kapka@Sinclair.edu

President's Monthly Brief:

December's meeting will continue our theme of Modeling a Sustainable world with a look at Daylight Modeling. Come to the December lunch meeting and learn how modeling enhances Energy and Environmental Design for lighting.

Looking ahead, January is our annual holiday party. Once again, the Sinclair Culinary Competition Team will prepare a gourmet feast. This year we are adding a wine course with dinner. But seating is limited, so make your reservations early. There will be no walk-ins but we will keep a "waiting list" if we run out of reservations. See flyer on page 8!

Finally, please continue to spread the word about our Scholarship offerings. Up to two \$500 scholarships will be awarded this year to deserving students who are either related to a Dayton ASHRAE member or who are Student ASHRAE members themselves. More details can be found on our website www.daytonashrae.org. The deadline to apply is January 31, 2011.

Rick Pavlak PE, LEED AP

Holiday Dinner January 22!
Make reservations today!

Dayton ASHRAE Scholarship Qualifications:

1. Undergraduate or graduate degree candidates enrolled in Engineering, Engineering Technology, Energy Engineering, Facilities Management, Construction Management, or similar degree leading to a career in the construction industry.
2. Member of Dayton Chapter of ASHRAE (paying local dues) and their immediate family members, or Student ASHRAE member.
3. Have completed 12 quarter hours or semester hours towards their degree. **More details on flyer on page 9!**

Research Promotion Notes:

Dayton ASHRAE has raised \$4000 so far this year for Research, consisting primarily of "Full Circle" contributions from the Board of Governors and last year's golf outing (we always contribute the golf outing money in the following year). NOW is the time to get those tax-deductible contributions in ahead of the tax deadline. How about giving back a little to the industry that has given so much to you? See page 5 for details.

Coming soon: How you can multiply your research contribution through the ASHRAE Foundation!

Dayton ASHRAE 2010-2011 Schedule

September 13, 2010: Young Engineers in ASHRAE,
Lunch Meeting, 11:30 at the Engineer's Club

October 11, 2010: AHRI Update, Engineer's Club

MEMBERSHIP PROMOTION NIGHT

5:00 Tech session on Equipment Selection (1 PDH)

6:00 Dinner, AHRI Update (1 PDH)

November 8, 2010: Using CFD in HVAC, Engineer's Club

RESEARCH PROMOTION NIGHT

STUDENT NIGHT

5:00 Tech session, Modeling Dorm Room Airflow (1 PDH)

6:00 Dinner, CFD Modeling Tools (1 PDH)

December 13, 2010: Daylight Modeling, Engineer's Club

Co-sponsored by IFMA

11:30 Lunch (1 PDH)

January 22, 2011: Holiday Party at Sinclair Community College

February 21, 2011: BIM, Sinclair Community College

STUDENT NIGHT

PROGRAM DATE & TIME CHANGE!

5:00 Tech session, Hands-on Revit workshops (1 PDH)

6:00 Dinner, BIM Update (1 PDH)

March 15, 2011: Building Energy Modeling, Engineer's Club

Co-sponsored by AIA PROGRAM DATE & TIME CHANGE!

3:00 Technical Program, (2 PDH)

6:00 Dinner

April 11, 2011: 90.1-2010, Engineer's Club

MEMBERSHIP PROMOTION NIGHT

5:00 Tech Session, Applying 90.1 (1 PDH)

6:00 Dinner, 90.1-2010 Update (1 PDH)

April 21, 2011: ASHRAE Webcast, Sinclair Community College

1:00—Geothermal Heat Pumps (3 PDH)

May 12, 2011: Golf Outing

BOG Meetings: 3rd Thursdays of the month, 8 AM, Heapy

9/16, 10/28, 11/18, 12/16, 1/20, 2/17, 3/17, 4/21, 5/19, 6/16



Employers



Have a Job to Fill?

Advertise in your Dayton ASHRAE Newsletter and on the Dayton ASHRAE Website.

Insert a business-card size ad for \$20 a month or \$100 a year.

All proceeds to Dayton ASHRAE Scholarship Fund.

Send ad copy to : Lorraine.Kapka@Sinclair.edu

Dayton ASHRAE Members

Need a Job?

Submit your profile to your Dayton ASHRAE Newsletter.

We'll print it for FREE!

Limited to 250 words plus contact information.

Send ad copy to : Lorraine.Kapka@Sinclair.edu

Volunteers Needed

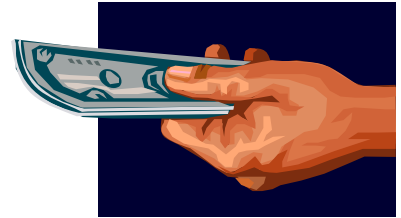
Ready to Give Back to YOUR Industry?

Dayton ASHRAE needs members to work on committees.

Contact Rick Pavlak at:

RPavlak@Heapy.com

2010-2011 ASHRAE RESEARCH Dayton ASHRAE



Contribution Form

2010 was a banner year for ASHRAE with the publication of 90.1-2010 and Standard 189. The Dayton Chapter again met their goal to raise money for research last year. With so much work to do to reach ambitious energy consumption reduction goals, more research is needed than ever before! You can help make the difference!

This industry gives all of us our livelihood. ASHRAE's research and educational programs are what keeps our industry and profession on the leading edge and assures its continued existence. Confident that you will recognize the benefits of this investment, I am asking you to help fund future HVAC&R research and development. Together, we can all make a difference!

Amount enclosed: ___ \$250 ___ \$150 ___ \$100 ___ \$50 ___ Other (specify) _____

Name: _____

Address: _____

Phone Number: _____

Member Number (If known): _____

Do you want to be recognized in the Dayton newsletter as a contributor? (circle) YES NO

Mail completed form with your check, payable to ASHRAE Research to:

Denny Lammlein
29 Sandelwood Street
Springboro, OH 45066

Invest in the Future: Support ASHRAE Research!



For Release:

Dec. 1, 2010

Contact Jodi Scott Public Relations
678-539-1140
jscott@ashrae.org

User's Manual Key to Meeting Requirements of the Green Standard

ATLANTA—Knowing what to do is not the same as knowing how. A new User's Manual educates industry professionals on how to meet the requirements of a green building standard published by three leading industry organizations.

Standard 189.1-2009, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings*, was published earlier this year by ASHRAE in conjunction with the Illuminating Engineering Society of North America (IES) and the U.S. Green Building Council (USGBC). The standard provides a long-needed green building foundation for those who strive to design, build and operate green buildings.

A newly published User's Manual is now available.

“Because of the breadth of the key topic areas covered in the standard – site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources – it is important for users to have a thorough understanding of how they come together to create a sustainable building,” Kent Peterson, former chair of the Standard 189.1 committee, said. “The User's Manual aids architects and engineers in applying the standard to design; general and specialty contractors in constructing buildings that are in compliance; and plan examiners and field inspectors in enforcing the standard where adopted into code.”

The new User's Manual provides explanations of the standard's requirements and examples of its application. It contains sample calculations, forms to demonstrate compliance and references to helpful resources and websites. This User's Manual can also be suitable for use in educational programs.

For complete information on the standard, including a readable copy, visit www.ashrae.org/greenstandard.

Standard 189.1 also serves as jurisdictional compliance option to the International Green Construction Code authored by the International Code Council, ASTM International and the American Institute of Architects.

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore. The cost of the Standard 189.1 User's Manual is \$93 (\$79, ASHRAE members)

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The Official Jobs Board for the American Society of
Heating, Refrigerating and Air-Conditioning Engineers

Welcome to ASHRAEJobs.com
Your source for HVACR Engineering Careers





Dayton Chapter ASHRAE

<http://www.daytonashrae.org>

Membership Application and Roster Information 2010-2011

Your Name			Your Company Name		
Home Address			Business Address		
City	State	Zip	City	State	Zip
() -			() -	() -	
Home Phone	Spouse Name		Business Phone	Ext.	Fax Number
Home e-mail address			Business e-mail address		

SEND NEWSLETTER TO: Home Address Home email address Business Address Business email address

I prefer Lunch Meetings _____ I prefer Dinner Meetings _____ I have no preference _____

Chapter achievements are accomplished through active committee involvement. If you would like to promote your Society by serving as a committee chair or assist on one of the chapter committees, please indicate in which committee you are interested below. Please indicate your first preference by number 1 and so on.

- Education
 Membership
 Research
 Historian
 Newsletter
 Chapter Office
 CTTC (Refrigeration; Technical, Energy & Government; Programs)
 Golf Outing
 Communication
 Holiday Party
 Honors & Awards

Please Select Your Preferred Roster Affiliation

Consultant Contractor Industry/Government Retired
Education Student: School _____ Degree _____ Approximate Graduation Date _____

Wholesalers, Manufacturer's Rep/Sales Offices, Fill in trade names of products you represent below

Air Devices	Louvers and Dampers
Air Handlers	Make-Up Air Units
Boilers	Packaged A/C
Building Automation	Pre-Insulated Pipe
Chillers	Pumps
Coils	Sound Attenuation
Computer Room Equipment	Steam Specialties
Cooling Towers	Air Terminal Units
Ductwork	Thermal Storage
Dust Collection	Unit Heaters
Fans	Unit Ventilators
Fan Coil Units	Vibration Isolators
Filtration	Valves
Heat Exchangers	Variable Speed Drives
Heating Equipment	Water Source Heat Pumps
Humidity Control	Water Treatment
Kitchen, Laboratory Fume Hoods	Other

*Dayton Chapter ASHRAE dues for the Society year beginning July 1, 2010 and ending June 30, 2011 are \$95 per year. Dayton Chapter ASHRAE dues include 6 dinner/lunch meetings, and both you and a guest for the holiday event. * Note: Be sure to begin paying Local dues when you pay your National Dues.*

Please return this application and a check or money order in the amount of \$95 made payable to Dayton ASHRAE to:

DAYTON ASHRAE, PO Box 3202, Dayton, OH. 45401

Paid local dues with your annual dues? Please return the form anyway!

Let's Get Ready to Party!

Come enjoy a gourmet meal prepared and presented by the Sinclair Community College Culinary Competition Team

Appetizers: Assorted sausages, cheeses & marinated vegetables
Salad Haley's salad
Entree Roasted Rack of Lamb, Rissoto and Patty Pan Squash
Dessert Double chocolate Cake with layer of raspberry puree
One course of wine included
Additional wine courses may be purchased at the door

Date: 01/22/11

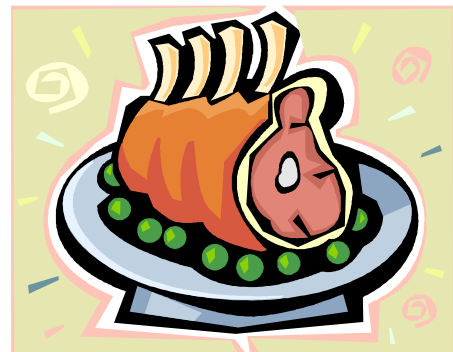
Time: 6:30 PM

**Dayton ASHRAE Members
and 1 Guest: FREE
Other guests: \$50 per**

person

**SINCLAIR COMMUNITY COLLEGE
BUILDING 13, 4TH FLOOR
FREE PARKING BEHIND
BUILDING 13
(OFF PERRY STREET)**

Reservations required by:
January 12, 2011 to
jpfauber@heapy.com
or 224-0861.



**Limited to
first 80
reservations;
don't delay,
reserve
today!**



ASHRAE

\$500 SCHOLARSHIPS*



Promoting the Art and Science of Heating and Air Conditioning in the Miami Valley!

Dayton Chapter

Eligibility:

1. Undergraduate or graduate degree candidates enrolled in Engineering, Engineering Technology, Energy Engineering, Facilities Management, Construction Management, or similar degree leading to a career in the construction industry.
2. Member of Dayton Chapter of ASHRAE (paying local dues) and their immediate family members, or Student ASHRAE member.
3. Have completed 12 quarter hours or semester hours towards their degree.

Application Requirements:

1. Completed application.
2. College transcript including grades from Fall, 2010 term.
3. Personal recommendation from faculty member in student's program of study.
4. Statement from the student as to why they wish to study a discipline related to facility construction, operation or management.
5. Lists of activities within and outside the University and Industry.

Application Available at
www.daytonashrae.org

Questions? famauro@heapy.com

Application Must be Postmarked by
January 31, 2011

*Up to two scholarships will be awarded.

ASHRAE Learning Institute

Seminars & Courses at ASHRAE's Winter Conference in Las Vegas, NV

2 WAYS TO REGISTER

Internet: www.ashrae.org/lasvegascourses

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



ASHRAE
LEARNING INSTITUTE

Full Day Professional Development Seminar

\$485/\$395 ASHRAE Member -- Earn 6 PDH/.6 CEU or 6 AIA LU credits

The Commissioning Process in New & Existing Buildings

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Healthcare Facilities: Best Practice Design and Application

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Complying with ASHRAE/IES Standard 90.1-2010

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.



Implementing Energy Management in New and Existing Buildings: A Sustainable Activity

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Integrated Building Design

Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Energy Modeling Best Practices and Applications: HVAC/Thermal

Tuesday, Feb 1 – 9:00 a.m. - Noon, 2:00 p.m. - 5:00 p.m.

Half Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDH/.3 CEU or 3 AIA LU credits

Fundamental Requirements of ASHRAE Standard 62.1-2010

Saturday, Jan 29 – 8:00 a.m. to 11:00 a.m.



Application of Standard 62.1-2010: Multiple Spaces Equations & Spreadsheet Calculation

Saturday, Jan 29 – Noon to 3:00 p.m.



Understanding Air-to-Air Energy Recovery Technologies and Applications

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

Chilled Beam Technology for Excellent Indoor Climate in an Energy Efficient Manner

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

Using Standard 90.1 to Meet LEED Requirements

Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

The Commissioning Process & Guideline 0

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Determining Energy Savings from Performance Contracting and LEED Projects: M&V

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Understanding Standard 189.1-2009 for High-Performance Green Buildings

Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Understanding & Designing Dedicated Outdoor Air Systems (DOAS)

Tuesday, Feb 1 – 9:00 a.m. to Noon

Low Temperature Radiant Heating & High Temperature Radiant Cooling Systems

Tuesday, Feb 1 – 9:00 a.m. to Noon

Successful Solar Applications for Commercial & Industrial Facilities

Tuesday, Feb 1 – 9:00 a.m. to Noon

Avoiding IAQ Problems: Using ASHRAE's New IAQ Guide

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

District Cooling & Heating Systems: Central Plants

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

Designing Toward Net Zero Energy Commercial Buildings

Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.



Get web-based training you can trust, anytime, anywhere, and earn PDHs/CEUs in the process.

- Energy Efficiency
- High-Performance Green Buildings
- Data Centers
- HVAC&R

Train around your schedule.

Save time and travel expenses.

Visit www.ashrae-elearning.com

ASHRAE Certification Programs

Take advantage of ASHRAE's special pencil & paper administration of our certification examinations on Wednesday Feb. 2, 2011, in conjunction with the 2011 ASHRAE Winter Conference.

- Building Energy Assessment Professional (BEAP)
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance Building Design Professional (HBDP)
- Operations & Performance Management Professional (OPMP)

For more info, visit

www.ashrae.org/lasvegascertification

New Publications from ASHRAE

- Standard 189.1-2009: Standard for the Design of High-Performance Green Buildings (A Jurisdictional Compliance Option of the IGCC)*
- Standard 189.1-2009 User's Manual (A Jurisdictional Compliance Option of the IGCC)*
- ASHRAE GreenGuide 3rd Edition – The Design Construction, and Operations of Sustainable Buildings*
- ASHRAE Standard 90.1-2010: Energy Standard for Buildings Except Low-Rise Residential Buildings*
- ANSI/ASHRAE 55-2010 – Thermal Environmental Conditions for Human Occupancy*
- ANSI/ASHRAE 62.2-2010 – Ventilation for Acceptable Indoor Air Quality in Low-Rise Residential Buildings*
- ANSI/ASHRAE 62.1-2010 – Ventilation for Acceptable Indoor Air Quality*

Package:

- ANSI/ASHRAE 15-2010 – Safety Standard for Refrigeration Systems*
- ANSI/ASHRAE 34-2010 – Designation and Classification of Refrigerants*

Visit www.ashrae.org/bookstore to order