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
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

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**
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**
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
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: Larraine.Kapka@Sinclair.edu

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: Larraine.Kapka@Sinclair.edu

Ready to Give Back to YOUR Industry?
Dayton ASHRAE needs members to work on committees.
Contact Rick Pavlak at: RPavlak@Heapy.com
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!
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](http://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](http://www.ashrae.org/bookstore). The cost of the Standard 189.1 User’s Manual is $93 ($79, ASHRAE members)

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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

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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

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<thead>
<tr>
<th>Air Devices</th>
<th>Louvers and Dampers</th>
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<td>Air Handlers</td>
<td>Make-Up Air Units</td>
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<td>Boilers</td>
<td>Packaged A/C</td>
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<td>Building Automation</td>
<td>Pre-Insulated Pipe</td>
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<td>Vibration Isolators</td>
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<td>Heat Exchangers</td>
<td>Variable Speed Drives</td>
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<td>Heating Equipment</td>
<td>Water Source Heat Pumps</td>
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<td>Humidity Control</td>
<td>Water Treatment</td>
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<td>Kitchen, Laboratory Fume Hoods</td>
<td>Other</td>
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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!
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

Let’s Get Ready to Party!

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!
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.
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/certification

New Publications from ASHRAE

- ANSI/ASHRAE 55-2010 – Thermal Environmental Conditions for Human Occupancy
- ANSI/ASHRAE 62.1-2010 – Ventilation for Acceptable Indoor Air Quality

Package:
- ANSI/ASHRAE 34-2010 – Designation and Classification of Refrigerants

Visit www.ashrae.org/bookstore to order