



# Mississippi Valley Chapter Newsletter

January 2007

<http://www.mississippivalleyashrae.org>

Monthly Newsletter

## Event Schedule

- September 21, 2006  
Daylighting and Its Impact on HVAC
- October 19, 2006  
Commissioning for LEED Projects
- November 16, 2006  
RP 1219 HVAC Acoustics
- December 20, 2006  
Social Night – Dinner Theater at Circa 21
- January 18, 2007  
Air Barriers for Building Envelope
- February 15, 2007  
Dedicated Outdoor Air Systems
- March 15, 2007  
Variable Primary Flow Pumping Strategy
- April 19, 2007  
History of Steam Heat
- May 17, 2007  
Building Tour – John Deere Harvester Works
- June 2007  
Golf Outing

## Air Barriers for Building Envelope

This month, our meeting program is on air and moisture barriers for the building envelope. This meeting will be a joint meeting with the local chapter of the American Society of Professional Estimators (ASPE). The program will qualify for one hour of learning credit for AIA members. This course presents air / moisture barriers: air leakage, causes, air barriers, components, and the effect of these on energy consumption and conservation. Comparison between fluid applied air/ moisture barriers and traditional paper moisture barriers and fabric building wraps are also covered.

Tyson Kindstrom of Sto Corporation will give the presentation. Tyson has a contracting background as a project manager in commercial construction. Tyson has over 15 years of experience in construction both with Sto and as a contractor. Tyson currently serves on the advisory board for the Building Enclosure Council of Chicago and is also an active member of CSI and ICRI.

### January 18<sup>th</sup> Program

**Location:** The SteepleGate Inn  
100 W 76th St  
Davenport, IA

**Program:** Air Barriers for Building Envelope

**Agenda:** 4:30-5:30 Program  
5:30-5:45 Meeting  
5:45-6:45 Dinner

**Menu:** Prime Pork  
Snap Peas and Carrots  
Tossed Salad  
Garlic Herb Red Potatoes  
Desert

**Cost:** Members: Free  
Others: \$15

**RSVP:** [Online](#) or call Pat Igou at 309-748-5903 by Monday, January 15.

## Measures to Attain Major Energy Savings Shared at ASHRAE Seminar

Guidance for building design engineers and owners that will result in buildings cutting their energy usage in half by 2010 currently is being developed by leading organizations in the building environment industry.

Achieving that goal will require more than simply substituting or adopting new technologies and systems. It will require changes in design practice in which the design team converts energy strategies into building plans, sections, details and construction.

An update on some of the measures that have been demonstrated to yield significant energy reductions will be presented at ASHRAE's 2007 Winter Meeting in a seminar, Achieving 50% and Beyond Approach to Net Zero Energy Use in Buildings Part 1. It takes place from 7:45-9:15 a.m. Monday, Jan. 29, and is followed by Part 2 from 10:45 a.m.-12:15 p.m.

The guidance is being developed by ASHRAE in cooperation with the American Institute of Architects, the Illuminating Engineering Society of North America and the U.S. Green Building Council, through a series of Advanced Energy Design Guides for the commercial building sector.

John Mitchell, P.E., is chairing a scoping committee studying ways to achieve building designs as close as is feasible to net zero energy use, defined as "a building which, on an annual basis, uses no more energy than is provided by the building's on-site renewable energy sources." This study will provide the basis for the development of Advanced Energy Design Guides to go 50 percent and beyond minimum standards for energy use.

"The goal of a 50 percent approach to net zero energy use, on either a site or source basis, is feasible," he said. "There are no apparent technological barriers to achieve the desired energy reductions but aggressive energy conservation strategies and energy generation are needed."

The scoping study recently was completed and identified measures that achieve significant energy savings. Some of the measures identified are:

- Improved daylighting and electrical illumination systems
- Reduction of parasitic power requirements in air and water distribution systems
- Separate treatment of ventilation and internal thermal loads
- Improved delivery of conditioning to where it is needed
- Improved part load performance of HVAC components
- Water loop heat pump systems.

Information related to the Advanced Energy Design Guide series can be found at [www.ashrae.org/aedg](http://www.ashrae.org/aedg).

Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 29-31, at McCormick Place. For more information, visit [www.ahrexpo.com](http://www.ahrexpo.com).

## *Chapter Technology Award*

It is time once again to think about potential projects for the Chapter Technology Awards. These awards are a chance for chapter members to show off their best work and to be recognized by the chapter. Entries may be forwarded to Region for further consideration.

The awards are accepted in the following categories: (Note at the Chapter level all entries will be judged in a single category.)

- I. Commercial Buildings (New and Existing)
- II. Institutional Buildings (New and Existing)

- III. Health Care Facilities (New and Existing)
- IV. Industrial Facilities or Processes (New and Existing)
- V. Public Assembly Facilities (New and Existing)
- VI. Residential Buildings (New and Existing)
  - Single Family
  - Multi-Family (Low and High Rise)
- VII. Alternative or Renewable Energy Use

#### Requirements:

1. Entries are to be submitted in the following format with no more than twelve (12) letter size (8 1/2 x 11 inches or S-I equivalent) pages, typed on one side only (font 12 characters per inch or equivalent), 1-inch margins, to include:
  - a. The Application Form. (Short or Long form is acceptable for Chapter Award, Long Form is required for Society award)
  - b. A maximum of ten (10) double-spaced, typewritten sheets to address items IV—VIII on page two of the long Application Form. (Charts, schematics, graphics are included in the 10-page limit. *All pages should be numbered*).
2. The entrant (1) must be a member (any grade) of ASHRAE or of an Associate Society, (2) must have a significant role in the project, and (3) must be willing to supply any additional information if requested by the judging panel.
3. The entrant, property owner and engineer of record must sign the entry Application Form where indicated. (Only required if submission for Region and society awards is desired)
4. The entrant must submit one (1) *completed entry form with original signatures* and (1) *additional copy of the complete entry*.
5. The project must have been in successful operation for at least one year at the time of entry. (Only required if submission for Region and society awards is desired)
6. In order for an entry to be judged at the Society level, it must have received a first-place award at the regional level.

#### General Instructions/Guidelines

1. A system schematic is strongly recommended (color-coded schematics may not duplicate well for the judges' black-and-white copies).
2. If a "judging criterion" is not applicable to the entry, a brief explanation should be provided.
3. Claims that are not sufficiently supported with verifiable technical evidence may receive little or no credit.
4. Information should be clear and concise.
5. If the project involves technology which is new and innovative, this feature should be clearly identified.
6. Commercialized items and notations are to be avoided. *Brand names of equipment or processes should not appear in the entry.*
7. Information may be submitted in I-P or S-I units or a combination of both.
8. All text must be in English.
9. Entries should be legible, uncluttered and attractive. The competition does not require nor encourage the entry be professionally produced.
10. Photographs are neither necessary nor encouraged (because judges

use black-and-white duplicated copies).

#### Judging Criteria

Energy Efficiency (15 points)

Indoor Air Quality (IAQ) and Thermal Comfort (15 Points)

Innovation (15 Points)

Operation and Maintenance (15 Points)

Cost Effectiveness (15 Points)

Environmental Impact (15 Points)

Quality of Presentation (5 Points)

Judges' Prerogative (5 Points)

The applications for the technology awards may use either the short or long form as found on ASHRAE's Website. To find the forms go to the ASHRAE CTTC web site ([www.ashrae.org/publications/detail/14692](http://www.ashrae.org/publications/detail/14692)). This page will have links to PDF files for both the short and long entry forms. The use of the long form is encouraged if the applicant would like to submit their project to the regional level.

Applications are due by March 3<sup>rd</sup>. Awards will be judged using the same criteria used for regional and society technology awards. Awards are given at the discretion of the judges. Award Winners will be announced at the April meeting. Chapter awards will be as follows:

1<sup>st</sup> Place: \$100 cash prize

2<sup>nd</sup> Place: \$50 cash prize

Each entrant will receive a \$50 gift certificate for use at a local restaurant.

#### Engineers Week

National Engineers Week is February 18 through 24. The Quad City Engineering and Science Council will sponsor the 45th Annual National Engineers Week Banquet on February 23. The speaker will be Bruce Wood, CEO of ePower Synergies, Inc. The topic will be The Power of the Future – Hydrogen and Fuel Cells. The banquet will begin at 5:30 at The Lodge in Bettendorf. The cost is \$30/person. Reservations can be made on-line at [www.qcesc.org/banquet.htm](http://www.qcesc.org/banquet.htm) or call 309-737-5895.

2006-2007 Officers/Board of Governors

President: Bruce Britson  
Vice President: Jim Nonnenmann  
Treasurer: Andrew Price  
Secretary: Pat Igou  
Past President: Gary Lange  
Member at Large: Eric Granzow  
Member at Large: Brian Hodgins

2006-2007 Committee Chairs

CRC Delegate: Jim Nonnenmann  
CRC Alternate: Andrew Price  
Historian: Sherm Sweeney  
Membership: Tracy Van Damme  
Programs: Jim Nonnenmann  
Resource Promotion: Gary Lange  
Seminar: Bruce Davis  
Student Activities: Matt Schneider  
CTTC: Jon Bovenkamp  
Webmaster: Eric Granzow  
Assistant Webmaster: John Schaub

Monthly Meetings

The regular monthly meetings for the Mississippi Valley Chapter of ASHRAE are held on the 3rd Thursday of each month from September to May unless otherwise noted. Meetings are located at the Steeplegate Best Western in Davenport Iowa unless noted otherwise.

[www.mississippivalleyashrae.org](http://www.mississippivalleyashrae.org)

Only You Can Help!!!

In order for our chapter to grow and maintain the great membership we have enjoyed, we need volunteers to help with the running of the chapter. Volunteers are needed for the following committees:

**Membership**                      **CTTC**  
**Student Activities**              **History**  
**Resource Promotion**

Contact any officer or committee chair to Volunteer!

Sponsors Needed

The Mississippi Valley Chapter of ASHRAE is bringing Dan Holohan to our April 19<sup>th</sup> chapter meeting to speak on the History of Steam Heat. Dan is a nationally know author and lecturer with an entertaining style. The chapter is looking for sponsors to help defray a portion of the costs to bring Dan to the Quad Cities. If you can help, please contact Andrew Price at 563-264-6600.



Mississippi Valley Chapter  
ASHRAE  
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Moline, Illinois 61265