



# The Razorback Report

www.arkansasashrae.org

Volume XIX, Issue 4, December 2007

Arkansas Chapter Newsletter for the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

## NOVEMBER MEETINGS

### Northwest Arkansas

Date: Thursday, December 6th

Location: Fayetteville Country Club

Cost: \$15.00 / person

Schedule:

4:30 pm Steering Committee Meeting

5:30 pm Social

6:00 pm ASHRAE Business / Dinner

6:45-8:00 pm Program - "Kitchen Ventilation" -

Bruce Radant

### Central Arkansas

Date: Wednesday, December 5th

Location: Camp Aldersgate

Cost: \$15.00 / person

Schedule:

10:30 am Board Meeting

11:30 am Tech Session - "Tour Camp Aldersgate"

12:00 pm Lunch

12:15-1:00 pm Program - "Kitchen Ventilation" -

Bruce Radant

## The President's Message

*By Steve Titus*

*Chapter President*

Well Thanksgiving has come and gone, and I personally have a lot to be thankful for. I had a great holiday with my family, and I hope you all did as well. Now Christmas is fast approaching. December is a busy time, but I hope that everyone can fit the ASHRAE meeting in this month.

December also means renewing your licenses, and counting those pesky PDHs. Of course, the meeting provides you a chance to get one more in the bank, but for all of you who are short, ASHRAE is offering online courses now, and you can earn 2 PDHs in your first course. The best part is the first one is free. There is a fee after that, but it can be an easy and convenient way to earn those few extra credits you need.

You can get more information at [www.ASHRAE-eLearning.org](http://www.ASHRAE-eLearning.org).

Also, for all of you looking to expand your professional credentials, ASHRAE is announcing their Healthcare Facility Design Professional certification program. You all should have received a mailing, and of course there is more information on the ASHRAE website.

I am looking forward to another great meeting, and to seeing one everyone at Camp Aldersgate for the last meeting until the new year.

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## Northwest Section

*By Sam Browning*

*NW Section Liaison*

**Last month's NWA meeting had a great showing. The U of A students from Dr. Nutter's HVAC class accounted for about 8 of the 40 attendees. The presenters from Daikin did a wonderful job explaining VRF.**

**The next meeting will be at Fayetteville Country Club at 6:00 pm (5:30 social) December 6<sup>th</sup>. We are making the steering committee meeting a monthly standard that will begin at 5:00 pm at the Fayetteville Country Club prior to the monthly ASHRAE meeting, so anyone who would like to become more involved in the NWA ASHRAE section is welcome to attend.**

Month	Tech		Meeting Topic	Speaker	Meeting	Date	Location	Meeting	
	Session	Speaker						Sponsor	Designation
September	To Flush or Not to Flush	Tom Hanlon	Sustainable Communities	Chris Ladner	Central	5-Sep	Union Station	TME Inc.	
					NWA	6-Sep	Fayetteville Country Club		
October	Brief Introduction to Displacement Ventilation	Ken Loudermilk	Chilled Beams	Ken Loudermilk	Central	3-Oct	Camp Aldersgate	Trane Arkansas	Membership Promotion
					NWA	4-Oct	Fayetteville Country Club		
November	Energy Conservation in HVAC Systems	Russell Black	Variable Refrigerant Flow	Corey Bartlett	Central	7-Nov	Camp Aldersgate	Airetech Corporation	Student Meeting
					NWA	8-Nov	Fayetteville Country Club		
December	Camp Aldersgate Facility Tour	TBA	Kitchen Ventilation	Bruce Radant	Central	5-Dec	Camp Aldersgate	Pettit & Pettit	Research Promotion
					NWA	6-Dec	Fayetteville Country Club		
January	Government Affairs Update	TBA	Refrigeration Practices and Innovations	Wal-Mart Representative	Central	9-Jan	Camp Aldersgate	Powers of Arkansas	Refrigeration Meeting
					NWA	10-Jan	Fayetteville Country Club		
February	Effective Communications	Barry Benator	Fundamentals of Project Management – <i>Joint Meeting with CSI</i>	Barry Benator	Central	6-Feb	Camp Aldersgate	Comfort Systems USA	
					NWA	7-Feb	Fayetteville Country Club		
March	Building Pressurization	TBA	Pool Room Dehumidification	Scott McGinnis	Central	5-Mar	Camp Aldersgate	Wade Company	
					NWA	6-Mar	Fayetteville Country Club		
April	Retro-Commissioning Cost and Benefits	TBA	Tour of ADEQ Building	Tom Hanlon	Central	2-Apr	ADEQ	Fluid Solutions	Membership Promotion
					NWA	3-Apr	Fayetteville Country Club		
May	Past President's Night	N/A	Past President's Night	N/A	Central & NWA	16-May	Dickey Stephen's Park Fayetteville Country Club	Batson Bravo	Student Meeting

## ASHRAE Press Release

Submitted by:  
Jodi Dunlop, Public Relations

For Release:  
Nov. 26, 2007

Contact: Jodi Dunlop  
Public Relations  
678-539-1140  
[jdunlop@ashrae.org](mailto:jdunlop@ashrae.org)  
1791 Tullie Circle NE  
Atlanta, GA 30329



'08 ASHRAE

### Measuring Up: Case Studies of Green Building Energy Performance Shared in ASHRAE Seminar

ATLANTA – When it comes to high-performance buildings, the proof is performance.

Measuring actual energy performance, however, can be challenging due to inadequate modeling practices, failure to include operations staff in goal setting, and lack of adequate budgets for commissioning, evaluations and ongoing benchmarking.

“As more actual energy performance data become available on high-performing buildings, clearer and more realistic expectations will help establish confidence within the building design and construction industry about costs and savings,” said Donald Winston, The Durst Organization, New York, N.Y.

Winston is one of three speakers who will provide a look at the role of performance measurement in high-performing buildings presented in a seminar at ASHRAE’s 2008 Winter Meeting, Jan. 19-23, New York City. The seminar, *Green Building Energy Performance: Some Experience and Data from the Field*, takes place from 9:15-10:45 a.m. Jan. 23 at the New York Hilton.

Winston will focus on his experiences with Class A office space in midtown Manhattan, including the Conde Nast Building at 4 Times Square and recent high-rise green residential buildings. His experiences with this building also are featured in a new magazine, *High Performing Buildings*, recently launched by ASHRAE.

Based on the Durst Organization’s experiences with 4 Times Square, several design changes

*(Continued on page 4)*

(Continued from page 3)

are being made to its current project, the Bank of America Tower at 1 Bryant Park. These changes deal with use of fuel cells, photovoltaics and commissioning and owner involvement.

“Energy cost savings are often cited as offsetting any additional first costs of green buildings,” said Adam Hinge, a member of ASHRAE’s Technical Committee TC 7.6, Systems Energy Utilization, which that is sponsoring the seminar. “Many times the cited energy benefits are based on predicted, not measured, savings. In some cases actual energy performance can be quite different from predicted performance. Accurate reporting of the actual performance of green buildings is important, as sharing operating results and lessons learned earlier rather than later can avoid repeating potential mistakes as the green buildings movement proceeds. This seminar presents experience and data on several high-profile projects.”

Other speakers in the ASHRAE seminar are:

- *High-Rise Residential Buildings: What Works and What Doesn’t*, Michael Gubbins, The Albanese Organization, New York, N.Y.
- *From Energy Model to Ongoing Operation: A Portfolio Wide Approach to Greening Schools*, James F. Dolan, P.E., O’Dea, Lynch, Abbatista Consulting Engineers, PC, Hawthorne, N.Y.
- *Lessons Learned in Operation High-Performance Green Buildings*, Donald Winston, P.E., Durst Organization, New York, N.Y.

For more information about the ASHRAE meeting, Jan. 19-23, New York Hilton, visit [www.ashrae.org/newyork](http://www.ashrae.org/newyork).

Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 22-24 (Tuesday-Thursday), at Javits Convention Center. For more information, visit [www.ahrexpo.com](http://www.ahrexpo.com).

ASHRAE, founded in 1894, is an international organization of 55,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

## Chapter Website Update

Submitted by

Haidara Agalheir - Webmaster

The Web site is up-to-date! Have you missed a meeting? Are you a new member and want to know more about the Arkansas chapter of ASHRAE? Logon to [www.arkansasashrae.org](http://www.arkansasashrae.org) to download previous Power Point Presentations, get detailed info about future meetings, update your membership information, pay your dues online, submit your resume, enjoy pictures of past events, and more. Feel free to send us any feedback you may have. Please visit us at [www.arkansasashrae.org](http://www.arkansasashrae.org) soon.

## ASHRAE Press Release

Submitted by:  
Jodi Dunlop - Public Relations

For Release:  
November 21, 2007

Contact: Jodi Dunlop  
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678-539-1140  
jdunlop@ashrae.org



### ASHRAE Launches New Magazine Dedicated to High-Performing Buildings

ATLANTA – ASHRAE has launched a new magazine to help decision-makers in the building community learn about the latest developments in innovative technologies and energy-efficient design and operation.

Targeted at building owners, facility managers, architects and engineers, High Performing Buildings features working case studies of exemplary buildings developed by leading practitioners in the sustainability movement.

Also included is a “lessons learned” section in each article where building designers and operators explain what went right, what went wrong, how problems were resolved and what could have been done better.

“It is essential that ASHRAE share both the technologies and measured performance of high-performance buildings to change the status quo and help transform the building industry to a more sustainable built environment,” said Kent Peterson, ASHRAE president.

ASHRAE’s goal is to advance the concept of integrated building design with a focus on measured building performance, not just design of sustainable buildings. The cases studies featured will provide performance data, verifying actual sustainability performance.

*(Continued on page 10)*

**Have you changed jobs recently?**  
**Do you have a new email provider?**

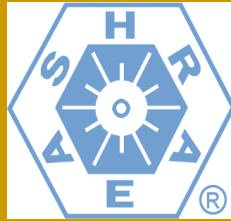
**If so, you probably need to update your  
Biographical Information with Society.**

## ASHRAE Press Release

Submitted by:  
Jodi Dunlop - Public Relations

For Release:  
December 3, 2007

Contact: Jodi Dunlop  
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Atlanta, GA 30329



### Database of Building, Equipment Owning, Operating Costs Provided by ASHRAE

ATLANTA – Every day, engineers are asked to advise building owners and managers on strategic decisions involving the life cycle and functionality of buildings.

In the past, lack of valid data has left engineers without a solid basis for making these decisions.

A new free online database from ASHRAE provides engineers with equipment service life and annual maintenance costs for a variety of building types and HVAC systems. The database can be accessed at [www.ashrae.org/database](http://www.ashrae.org/database).

It contains more than 300 building types and more than 38,000 pieces of equipment with service life data.

The database allows users to access up-to-date information to determine a range of statistical values for equipment owning and operating costs. With this, ASHRAE is providing the necessary methods and information to assist in using life-cycle analysis techniques to help select the most appropriate HVAC system for a specific application.

“Life-cycle evaluations provide the most effective method for determining the best value of HVAC system alternatives,” said Lynn Bellenger, chair of ASHRAE’s Technology Council. “In order to facilitate the use of life-cycle analysis techniques by decision makers, the necessary data must be available, current and correctly applied. This database provides that needed data.”

As part of the project, users are encouraged to contribute their own service life and maintenance cost data, further expanding the utility of this tool. Over a period of time, this input will provide sufficient service life and maintenance cost data to allow the comparative analysis of many different HVAC systems types in a broad variety of applications. Data can be entered by logging into the database and registering, which is free.

Information from the database also is used to update the ASHRAE Handbook. Chapter 36, Owning and Operating Costs, of the 2007 ASHRAE Handbook, *HVAC Applications*, contains median equipment service life data from the first 163 commercial buildings that were used to seed the database, with updates to come as the database grows.

The database is the result of ASHRAE research project 1237, *Interactive Web-based Owning and Operating Cost Database*, sponsored by ASHRAE’s technical committee 7.8, Owning and Operating Costs.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

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

## Arkansas Chapter Meeting RSVP Form

Company Name: \_\_\_\_\_

Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Signed: \_\_\_\_\_

ROUTING

For reservations to the Central Arkansas Chapter meeting send this form by **Tuesday, December 4th** to ***Steve Titus*** : sctitus@aristotle.net or via **FAX** at 501-375-4628

For reservations to the Northwest Arkansas Chapter meeting send this form by **Tuesday, December 4th** to ***Sam Browning*** : sbrowning@trane.com or via **FAX** at 479-361-5977.

<b>MEMBER NAME (PLEASE PRINT)</b>	<b>CENTRAL December 5th</b>	<b>NW ARK December 6th</b>	<b>EATING (Y or N)</b>

**NOTES:** Please fax this form to the name and fax number as referenced above  
 The meal is no cost to student members, however an RSVP is necessary.  
 All "no shows" will be responsible for the cost of their meal.  
**In order to provide you with the best service for your Chapter's money, it is necessary to RSVP for each meeting.**

**RSVP for the December meeting online at [www.arkansasashrae.org](http://www.arkansasashrae.org)**

### December Meeting Topics

Tech Session - Tour Camp Aldersgate

Program - Kitchen Ventilation - Bruce Radant

### Meeting Sponsor: Pettit & Pettit

## Future ASHRAE Meetings:

**2008 ASHRAE Winter Meeting**  
**January 19-23**  
**New York, NY**

**2008 ASHRAE Region VIII CRC**  
**April 2008**  
**Shreveport, LA**

**2008 ASHRAE Annual Meeting**  
**June 21 - 25**  
**Salt Lake City, UT**

**2009 ASHRAE Winter Meeting**  
**January 24 - 28**  
**Chicago, IL**

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## 2007-2008 Chapter Officers

<u>President</u>	Steve Titus	501.375.1181	sctitus@aristotle.net
<u>Vice-Pres.</u>	Kim Koch	501.666.6776	kkoch@tmeinc.com
<u>Treasurer</u>	Chris Ahne	501.661.0621	cahne@trane.com
<u>Secretary</u>	Steve Keen	501.374.5420	skeen@powersar.com

## Board of Governors

Charles Wetzler		cwetzler@sbcglobal.net
Marc White	501.664.3311	mwhite@batsonbravo.com
Tim Staley	501-666.6776	tstaley@tmeinc.com
Chance Hollingsworth (CRC Delegate)	501-280.0404	chance@airetechcorp.com
John Hodoway (CRC Alternate)	501.372.2900	john.hodoway@mail.ashrae.org

## Committee Chairs

Membership	Joel Funkhouser	jcfunkhouser@garverengineers.com
Student Activities	Bill Simpson	wsimpson@trane.com
Programs	James Dayer	jdayer@fluidsolutionsinc.com
Historian	Hank Wade	wadeco@aristotle.net
Refrigeration	Miguel Purdy	mlpurdy@vcaw.com
Research	John Hodoway	john.hodoway@mail.ashrae.org
Honors & Awards	Chance Hollingsworth	chance@airetechcorp.com
Technology Awards	Michelle Willock	mwhillock@johnprinceco.com
Newsletter	Mark Ring	mark@airetechcorp.com
NW Section	Sam Browning	SBrowning@Trane.Com
Social	Tony Demarco	tony@airetechcorp.com
Reception	Melanie Richardson	mrichardson@batsonbravo.com
Webmaster	Haidara Agalheir	HAgalheir@trane.com
Sustainability	Tom Hanlon	thanlon@tmeinc.com

## THE RAZORBACK REPORT

ARKANSAS CHAPTER OF ASHRAE  
 P.O. Box 180  
 LITTLE ROCK, AR 72203



## Arkansas Chapter Meeting Minutes

Submitted by  
Steve Keen, - Chapter Secretary

Board Meeting of November 7, 2007

### Officers and Board Members Present

Steve Titus, President  
Kim Koch, VP, Programs Chair, Technology Chair  
Chris Ahne, Treasurer  
Steve Keen, Secretary  
John Hodoway, BOG, Research Promotion Chair

### Committee Chairs Present

James Dayer, Programs Chair  
Bill Simpson, Student Activities Co-Chair  
Melanie Richardson, Reception  
Mark Ring, Newsletter Editor  
Joel Funkhouser

### Board Meeting Minutes

Steve Titus opened the meeting by requesting reports from officers and committee members.

Kim Koch reminded everyone next months meeting designation is chapter research. We are still needing ideas for a the CSI joint meeting

Chris Ahne submitted the treasurer's report which was accepted as presented and passed by acclamation. Chris stated the chapter accountants were in the process of reviewing the books. Chris is working on the June balance sheet and will submit later. There needs to be discussion on who is handling the checking account for NWA.

John Hodoway reported that Rheem Manufacturing has contributed \$20,000.00 to this year's foundation fund. This year's officers need to submit a contribution toward the full circle.

Charles Wetzler discussed the changes in bylaws to be presented at the regular meeting. The proposed changes have been published in the newsletter. A copy of the proposed changes will be handed out and voted on during the regular meeting. Charles discussed on change to the proposed wording. A proposal to delete the following wording from the proposal text, "within 60 days of their due date" was proposed, seconded and passed by acclamation.

Mark Ring reported the deadline for submissions to the December newsletter is November 21.

Joel Funkhouser reported many new student members are joining ASHRAE.

Steve Titus adjourned the Board Meeting.

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If you or someone you know isn't receiving the electronic version of the **Razorback Report** and would like to, please send an email to **mark@airetechcorp.com**.

## Arkansas Chapter Meeting Minutes

*(Continued from page 9)*

In the monthly meeting technical session Russell Black discussed energy conservation benefits using UVC lighting. Russell also included discussion on the economics and benefits of using low pressure drop high efficiency filters.

Steve Titus presented a motion to make the research contribution which was seconded and passed by voice vote.

John Hodoway acknowledged the Rheem Manufacturing research contribution. John also mentioned the local chapter goal for research funding is \$50,000.00.

Charles Wetzler discussed the proposed change in bylaws, including the amended wording. The bylaw revisions were read (separately) as proposed. A motion was made and seconded to accept the changes as presented and previously published (with approved amendment). The motion was approved by voice vote.

Del Young presented a discussion on variable refrigerant flow HVAC systems. These types of systems have been developed in Europe and the Far East due to rising costs of utilities. Approximately 10 manufactures have the product available, most overseas. Systems include outdoor heat pumps, common refrigerant piping routed to zone fan coils capable of varying the refrigerant flow based on demand. Internal units have the capability of heating and cooling, similar to variable air flow systems with re-heat. Systems can offer higher part load efficiency than other systems such as water cooled and air cooled VAV systems. The systems include an inverter drive on at least one of the multiple air cooled heat pumps to vary the compressor speed. This unit meets the variable demand as other heat pumps are cycled on/off based on demand to provide stepped capacity. These systems are laid out similar to 4 pipe fan coil units with the common refrigerant piping replacing the chilled and heating water piping.

Meeting was adjourned.

*(Continued from page 5)*

The cover story of the first issue focuses on Heifer International. By providing gifts of livestock and plants to financially disadvantaged families around the world, Heifer International teaches sustainability by showing recipients how to use those gifts wisely.

The importance of passing on the gift of sustainability is also highlighted in the organization's Arkansas headquarters, which features earth-friendly designs such as a constructed wetlands, a gray-water tower and energy-saving techniques.

"One thing that Heifer understands is that if we are going to have a lasting impact on world hunger, everything we do must be sustainable – that is, the means for production of food and income must renew the environment and not deplete it," Jo Luck, Heifer's CEO and president, said. "In conceiving and constructing our new office building, we are striving to live up to the aspirations of Heifer's own mission of ending hunger and saving the earth."

To learn more or to subscribe, visit [www.HPBmagazine.org](http://www.HPBmagazine.org). The quarterly magazine will be distributed via print and digitally.

## Obituaries

*Submitted By Chance Hollingsworth*

John Dennis Fitton, 61, of Rogers, Ark., died Wednesday, Nov. 7, 2007, at a local nursing home. He was born July 27, 1946, in Harrison, Ark., to Garvin Fitton and Martha Ann Hamilton Fitton.

He was a lifetime resident of Arkansas. He attended the University of Arkansas, where he received a bachelor's degree in mechanical engineering and a Master of Business Administration degree and was a member of the Sigma Chi fraternity. He served in the U. S. Army Reserves and was a Methodist. He was an avid outdoorsman and enjoyed bicycling, hiking, floating the Buffalo River in Arkansas and traveling.

Survivors include two daughters and a son-in-law, Holly Hayes and Ashley Hayes of Springtown, Ark., and Brooke Fitton of Little Rock, Ark.; a brother and sister-in-law, Tom Fitton and Anne Fitton of Harrison, Ark.; a sister and brother-in-law, Ann Kelly and Pat Kelly of Bentonville, Ark.; a granddaughter; Haley Hayes of Springtown; and several nieces and nephews. A memorial service was held Saturday, Nov. 10, at the First United Methodist Church in Harrison, Ark., with the Rev. John Darnall.

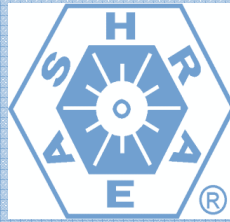
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## ASHRAE Press Release

Submitted by:  
Jodi Dunlop - Public Relations

For Release:  
Nov. 7, 2007

Contact: Jodi Dunlop  
Public Relations  
678-539-1140  
[jdunlop@ashrae.org](mailto:jdunlop@ashrae.org)  
1791 Tullie Circle NE  
Atlanta, GA 30329



### ASHRAE Studies Heat, Moisture Production Rates of Swine, Houses

ATLANTA – The proverbial “little pig who stayed home” will be assured of good indoor environmental quality under proposed research from ASHRAE.

The Society is funding research to update heat and moisture production rates from pigs and their housing facilities, which are the foundation for effective design and operation of HVAC&R systems.

“Without proper heat and moisture production values, ventilation systems will be inadequately designed and operated, resulting in unsuitable building environments for animals and workers,” said Lingying Zhao, Ph.D., a member of ASHRAE’s technical committee on plant and animal environment, which is sponsoring the project. “Incorrect data about those values also can create potential moisture buildup that could lead to premature building failure.”

The project is one of 16 currently out for bid by ASHRAE. Complete information on all of the projects and bid submittal information can be found at [www.ashrae.org/research](http://www.ashrae.org/research).

Currently available data on heat and moisture production rates is nearly 50 years old. Since that time, swine production has undergone significant changes in terms of genetic potential, nutrition, housing strategies and production systems, all of which affect swine heat and moisture production rate.

New feeds, for example, can affect the heat production rate from the actions of eating, digestion, and absorption and utilization of the nutrients. The amount pigs are fed today on a regular basis has changed throughout the years as well as differences in the nutrients contained in today’s feed.

Types of housing also impacts swine heat and moisture production rates. Although pigs have a few sweat glands, they mainly stay cool due to other moisture sources in their pen evaporating from their skin, according to Zhao.

Been involved with ASHRAE enough that you may qualify for a **Distinguished Service Award** but can’t remember? Keep track of your ASHRAE service history years down the road by recording your activity today on the **Biographical Record System** at the following URL.

<http://xp20.ashrae.org/bio/>

# 2007 seminar

new Ideas & technologies **commercial kitchen ventilation**  
dec 6 | springdale, arkansas

## Learn Essential Information About Kitchen Ventilation

Professional credit hours available upon request.

### Agenda

8:00 a | Registration  
8:15 a | Kitchen Ventilation Seminar  
12:15 p | Complimentary Lunch

Sponsored by **CAPTIVEAIRE**

### Located

Holiday Inn & Northwest  
Arkansas Convention Center  
1500 S. 48th Street  
Springdale, Ar 72762  
Phone: 479.751.8300

Contact: Rod Hammeck & Team  
Phone: 800.221.7633  
Fax: 918.258.0687  
Email: reg80@captiveaire.com

## New Commercial Kitchen Ventilation (CKV) Seminar Includes the Following Topics

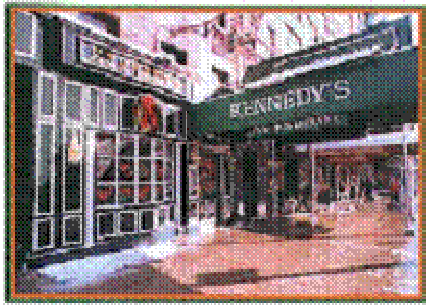
Introduction | Foundations of Modern CKV Design  
Exhaust Hoods | Types, Performance Improvements, and Code Issues  
Grease Filtration and Pollution Control | Design Options  
Exhaust Ducts | Design, Installation, and Code Issues  
Makeup Air | Sources, Equipment, and Energy Cost Issues  
Energy Conservative CKV Strategies  
Restaurant Fires | Observations of CKV Issues  
Kitchen Ventilation Case Studies

## Speaker: Doug Horton

Doug Horton is an independent management, communications, and technology consultant with over thirty years of government, corporate, and consulting experience. In the food service area, he consults on equipment and market development, technology assessment, purchasing, operations analysis, organization development, communications, and energy management. He is a popular speaker on energy and food-service topics at professional meetings and seminars, including those sponsored by industry trade organizations, energy companies, and manufacturers. Recently, he has been presenting the results of industry research on commercial kitchen ventilation to national audiences.

## Speaker / Founder: Bob Luddy

Bob Luddy opened Atlantic Fire Systems in a one-room facility in Raleigh, NC in 1976. Recognizing the demand for a quality manufacturer of kitchen ventilation equipment, Bob purchased a sheet metal shop in 1981 and transformed that into CaptiveAire Systems. Today, CaptiveAire employs over 500 people with fifty offices nationwide with sales reaching over \$180 million in 2006. Bob continues to apply his entrepreneurial skills not only in his business, but also in the public sector. His support of North Carolina entrepreneurs and the free market system are demonstrated through his roles in the following areas: Board of Directors & Founder, The Franklin Academy; Board of Directors, John Locke Foundation; and Founder & Developer, Franklin Park.



2008 Winter Meeting  
New York, NY

ASHRAE Region VIII  
Dinner – January 21, 2008  
Monday Night  
6:00 PM to 8:30 PM



Please RSVP to  
Ken Fulk  
Assistant Regional Chair  
[KFulk@rwb.net](mailto:KFulk@rwb.net)  
(972) 788-4222  
Fax (972) 788-0002

Reservations are required

Kennedy's Restaurant is within walking distance of the ASHRAE Headquarters Hotel which allows for an enjoyable stroll before or after dinner.

## Producing Dazzling Events Is Our Bright Spot!

**Choice of Mixed Seasonal Salad with  
House Dressing or Soup De Jour**

Entrée Choice of:  
**Chicken Hibernia**

**Roast Sirloin of Beef w/Red Wine Sauce**

**Grilled Salmon**

Each entrée served with fresh vegetables and Potato;  
additional Chef's Special available as an option

Dessert:  
**Apple Pie Chantilly or Ice Cream**

Beverages:  
**Unlimited Soft Drinks, Coffee  
(Decaffeinated available) and Iced Tea**

Price: \$40.00 per person







## ASHRAE's Healthcare Facility Design Professional (HFDP) Certification Program



The HFDP exam is now available on computer on your schedule!



# ASHRAE's HFDP Certification Can Advance Your Career and the Stature of Your Firm

- Expand Your Knowledge
- Enhance Your Credibility
- Demonstrate Commitment to Improving Your Work Product
- Add to Your Professional Credentials

In today's business environment, you need to gain an edge over your competition. One way to gain a competitive advantage is to earn a certification from ASHRAE, recognized worldwide as the HVAC&R industry's most credible, authoritative and timely source of engineering data.

### Exam offered in nearly 200 testing centers worldwide

*"The certification shows our present and future clients that we are focused on healthcare, and that we stay current with design standards."*

Ildefonso Bayron, Jr.  
Associate Partner, Syska Hennessy Group

www.ashrae.org/certification or 1-800-5 ASHRAE (1-800-527-4723) in U.S./Canada



## HEALTHCARE FACILITY DESIGN PROFESSIONAL CERTIFICATION

### The Steps to Earn the HFDP Certification

To earn the Healthcare Facility Design Professional certification, the candidate must submit an application and, after receiving approval from ASHRAE to participate in the program, successfully pass the examination. Interested individuals should:

**Step 1: Read the HFDP Guidebook:** Visit [www.ashrae.org/HFDPguidebook](http://www.ashrae.org/HFDPguidebook) to learn about the HFDP program's eligibility requirements, examination and available resources. Eligibility requirements include combinations of years of practical design experience and education. See the HFDP Guidebook for complete information.

**Step 2: Complete the HFDP Application:** Complete the online HFDP application form at [www.ashrae.org/certification](http://www.ashrae.org/certification) or call customer service at 1-800-527-4724 (US and Canada) or 404-636-8400 (worldwide). Via email, ASHRAE will send to each approved candidate a unique identification number and instructions on how to schedule an examination. ASHRAE has a process in place if a candidate's application is denied and the candidate wants to reapply.

**Step 3: Schedule an Examination:** Examinations are offered on computer at nearly 200 conveniently located testing centers worldwide. Candidates may schedule an examination appointment online or by

telephone. After receiving approval to participate in the program, the candidate has 90 days to register and take the exam. Failure to register and take the exam within 90 days will result in the candidate's forfeiture of application and payment.

### Step 4: Review Available Resources, as needed:

The HFDP Candidate Guidebook ([www.ashrae.org/HFDPguidebook](http://www.ashrae.org/HFDPguidebook)) identifies available resources to help candidates gain an understanding of the body of knowledge that the examination tests. Examples of the educational resources that are found in the HFDP Guidebook are ASHRAE's *HVAC Design Manual for Hospitals and Clinics* and Facility Guideline Institute/ AIA's *Guidelines for Design and Construction of Health Care Facilities*. Purchase of books or seminar registrations are not required to take the examination.

**Step 5: Renew the Certification:** The HFDP certification is renewable every three years. To retain certification, each person who has earned the certification must earn 45 PDHs during the three year period following initial certification or the last renewal.

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