



The A.S.H.R.A.E. Newsletter

American Society of Heating, Refrigeration and Air conditioning Engineers, Inc.
Southwest Florida Chapter # 139

Voted Region XII Best Newsletter for ASHRAE Year 1998-1999

December 2005

Volume 11 Issue 4



PRESIDENT'S MESSAGE

Four of your members recently met with the Technical Studies Advisory Board for Edison College. Those members are: Lawrin Ellis, Mike Myers, Lisa Duritsch, and John Pennington. The current program develops basic skills in the areas of 2D CAD, Manual Drafting, Blue Print Reading, and Estimating. Some of the Professors are an Architect, Kile Kitchen, teaching Structure and building design principles, Conceptual Design, and many well developed classes to help students develop interest and skills in his area. A General Contractor is teaching Project Management, Change Orders, Construction Management, and other items from his world of expertise. Other staff are extremely well qualified and presenting technical skills in the construction world.

Members of the committee included two from Collier County School District, two from Lee County School District, a General Contractor specializing in Historical Restoration, Civil Engineering firms, and other entrepreneurs interested in being of assistance to Edison College development.

We were interested in helping develop tracks that would bring students into contact with the HVAC world. We were well received and look forward to learning how to make a difference in their programs to assist our members and sponsors by creating prospective employees through Edison College programming. This was our first meeting. We are preparing for the next one!

Energy and efforts will be required by our industries employers to show interest in these students. Obviously through employment offers but maybe by sponsoring students in Co-Operative programs or paying for your employees to use Edison College as part of your employee training package. We will be actively listening and suggesting as we grow into our membership in this viable advisory committee.

Our Golf Tournament is behind us with many special memories. Significant money was raised for ASHRAE Research Promotion under the direction of Brian Mumme and his assistants. A special thanks to the Hole Sponsors and players in this effort.

We'll be going to the Hockey game on Friday, 12/9 for fun and fellowship. There will be some time for eating and visiting in our annual social event. With a price of \$14 per, you should think about your partners and children for a fun night.

Thank you for being a part of Southwest Florida ASHRAE Chapter.

John Pennington, President SWFL ASHRAE Chapter

DECEMBER MEETING NOTICE

Topic:

Hockey Game

Guest Speaker:

Florida Everblades

Meeting Location:

Germain Arena

Date:

Friday December 9, 2005

Time:

**6:00 - 7:30 Private Party in the Bud Zone
7:30 - ?? Game**

Cost:

\$14.00 per attendee.

Reservations are a must!!

email Mary Kay Gonzalez
fasteagle@aol.com
www.swflashrae.org

**Past Presidents of
#139 Southwest Florida Chapter**

1982 - 1983	Edward O'Neal, P.E.
1983 - 1984	Edward O'Neal, P.E.
1984 - 1985	Dennis Holland
1985 - 1986	Ross Montgomery
1986 - 1987	Jeff Dorini
1987 - 1988	Kermit Rood
1988 - 1989	Bill Malphus
1989 - 1990	Tom Delnay
1990 - 1991	Nelson Tarbox
1991 - 1992	Gary H. Griffin
1992 - 1993	Gary H. Griffin
1993 - 1994	Jeff Zenoniani
1994 - 1995	Lisa A. Duritsch
1995 - 1996	Jason Grabowski
1996 - 1997	James Faulkner
1997 - 1998	Robert Risley
1998 - 1999	Winifred Denius
1999 - 2000	Paul Martin
2000 - 2001	Don Pine
2001 - 2002	Randy Saul
2002 - 2003	Jason Allen
2003 - 2004	Mark Brant, PE
2004 - 2005	Guy Van Meulebrouck

Please help us update the ASHRAE email list

Email to Kurt Vega at kvega@saftronics.com,
call 239-693-7200 X218 or mail to:

Kurt Vega
5580 Enterprise Pkwy
Fort Myers, FL 33905
239-693-7200 ext. 218

Please include the following:

Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

Membership # _____

Membership News

GRADES OF ASHRAE MEMBERSHIP

MEMBER (ANNUAL DUES - \$150.00)

At the time of admission or advancement, 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 professional 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 that accredited by the Accreditation Board for Engineering and Technology in the United States or the Canadian Engineering Accreditation Board. Scientific education in fields other than engineering shall be from a college or university course of study which has been accredited by an organization charged with monitoring standards of performance.

One and one-half years of credit for each year of education for graduates of approved technical curricula.

One year of credit for each year of completed education for graduates of colleges or universities which do not have accreditation. Those holding associate degrees from technical institutions shall also be credited for one year for each year of education.

One year for each year of qualifying work experience in the performance of duties in work related to ASHRAE fields of interest, as verified by the applicant's reference, and shall have included research, teaching, design, contracting, engineering sales or engineering management.

Three years of credit for professional registration or 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.

ASSOCIATE MEMBER (ANNUAL DUES - \$150.00)

An Associate Member shall have had experience in technical matters, design, operation or maintenance in heating, refrigerating, air-conditioning or ventilating fields, or shall have an interest in the advancement of the Society's aims, and shall possess sufficient qualifications to cooperate with heating, refrigerating, air-conditioning, or ventilating engineers in the advancement of the knowledge relating to heating, refrigerating, air-conditioning or ventilating engineering and its application.

AFFILIATE MEMBER (ANNUAL DUES - \$40.00)

An Affiliate Member shall have had experience in technical matters, design, operation or maintenance in heating, refrigerating, air-conditioning or ventilating fields, or shall have an interest in the advancement of the Society's aims, and shall possess sufficient qualifications to cooperate with heating, refrigerating, air-conditioning or ventilating engineers in the advancement of the knowledge relating to heating, refrigerating, air-conditioning or ventilating engineering and its application.

The Affiliate Member grade is an introductory membership level for applicants who are under 30 years of age. Membership tenure in this grade is limited to three years. Affiliate Members receive monthly issues of the ASHRAE Journal and Insights Newsletter. The annual handbook is not a benefit of this grade.

Keith Enwright Membership Chair

Comings and Goings

Please join us in welcoming the following members and goodbye to one:

- Ronald A. Dombrowski – Safronics – New Member – Email rdombrowski@safronics.com
- Katie M. Tisdell – New Member – Email Katie@wadsworth-eng.com
- Richard C. Niess – Apogee Interactive, Inc. – Transferred In – Phone (239) 530-0786
- Craig Schneider – Phone (732) 988-9600
- Francis J. McCabe – Transferred out – Phone (239) 945-4324

Keith Enwright Membership Chair

Society News

ASHRAE Energy Design Guide, ASHRAE Journal Earn Awards from SBIC

ATLANTA – The Advanced Energy Design Guide for Small Office Buildings published by ASHRAE has been recognized with its third award related to sustainability.

Statements made in this publication are not expression of the Society

Also recognized with an award from the Sustainable Buildings Industry Council is a sustainability supplement to ASHRAE Journal.

The ASHRAE Journal supplement, *Building for the Future*, and the design guide both received honorable mention from the Sustainability Buildings Industry Council as part of its Best Sustainable Practice Awards. The publications were recognized in the educational initiatives category.

"These two publications are part of ASHRAE's technical resources that provide the engineering basis for sustainable buildings," Lee Burgett, P.E., ASHRAE president, said. "ASHRAE is pleased to be recognized for its efforts in engineering for sustainability."

Building for the Future is an annual supplement to ASHRAE Journal addressing several sustainable design issues for greater energy efficiency and responsible use of the earth's resources. It was published in the September 2005 issue.

The design guide was developed by a committee representing a diverse group of energy professionals drawn from ASHRAE, the American Institute of Architects (AIA), the New Buildings Institute (NBI), the Illuminating Engineering Society of North America (IESNA) and the Department of Energy (DOE).

The award is the third for the book, which earlier this year was recognized by the U.S. Green Building Council's as "a significant contribution helping to advance green building."

It also was recognized by the Alliance to Save Energy as part of its annual Stars of Energy Efficiency Awards program. The Alliance recognized ASHRAE for its "exemplary illustration of and commitment to energy-efficient policy and practice."

ASHRAE, AIA, IESNA and the U.S. Green Building Council are currently developing the second guide in the series, which will focus on small retail/mercantile spaces.

The cost of the Advanced Energy Design Guide for Small Office Buildings is \$59 (\$47, ASHRAE member).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at www.ashrae.org.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

A Summary of Florida Code Requirements for Placement of Mechanical Air Handling Units in Attics

*Compiled by Guy Van Meulebrouck PE,
November 4, 2005*

Florida codes deal with the subject of air handlers located in attic spaces in three separate places. This article summarizes those three requirements. These requirements are of great importance to architects yet appear in the mechanical and energy parts of the code, which are not necessarily read by architects.

1. All air handling units located outside of a conditioned space, whether commercial or residential, whether in attics or other hot muggy spaces, need to be rated and designed for outdoor installation. According to the Florida Mechanical Code chapter on General Conditions: "**303.6 Outdoor locations.** Appliances installed in other than indoor locations shall be listed and labeled for outdoor installation."
2. In relation to *commercial* applications: section 4 of the energy code states that air handling units may not be located in attics. "**13-410.1.ABCD.3.5.2 Air-handling units.** Air-handling units shall not be installed in attics (see definition of "Attic" in Section 202). "*Section 202 states attics are: "An enclosed unconditioned space located immediately below an un-insulated roof and immediately above the ceiling of a building. For the roof to be considered insulated, roof insulation shall be at least the R-value required to meet section 404.2.B.1 in Subchapter 13-4 and Section 604.1.ABCD.1 in Subchapter 13-6 (see "Under attic" "Roof").*"
3. In relation to *residential* applications: section 6 of the energy code states that air handling units may be in attics as long as certain conditions are met. Four conditions are listed. These are, then, in addition to the fifth condition stated above in section 303.6 of the mechanical code. So the conditions in 13-610.1.ABCD.3.5.2 for putting an air handler in a residential attic are:
 1. The service panel of the equipment is located within 6 feet of an attic access.
 2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
 3. The attic access opening is of sufficient size to replace the air handler.
 4. A notice is posted on the electric service panel indicating to the homeowner that the handler is located in the attic. In short, the notice is to explain that the air handler is in the attic and requires service. The required wording is spelled out in the code.
 5. The air handler in the attic space must be designed and rated for outdoor installation. (303.6 restated).

Air handlers in both commercial and residential applications may be located in the area above the ceiling and below the roof if the roof is insulated and the attic sealed so that the "attic" space is actually a conditioned space. Air should be supplied to the conditioned space for ventilation. (Reference FBC 13-406.1.ABC1.4).

4. Air handlers in either commercial or residential applications may be located in "the space above the ceiling and below the roof if the architect creates a mezzanine which is fully insulated and conditioned."

Solid Waste Energy Plant Tour

PLANT TOUR

Come tour this unique power plant. Using extreme temperatures, solid wastes (trash) is incinerated and the released heat of combustion harvested to generate electrical power. Using a system of 25 similar power plants in Florida, Covanta Corporation processes over 30,000 tons of waste *per day* and converts it to 565 megawatts of electricity (enough to power 800,000 homes). This saves an estimated 1 million barrels per year of oil and reduces landfill space by 12,500 square feet per year. Tour is open to ASHRAE members and guests. This is a good event to invite electrical engineers to.

THE DATE HAS MOVED: this tour will become an extended lunch meeting on Wednesday February 22, 2005. Lunch at a nearby restaurant (TBA) then a 1:30 tour.

To sign up email your name, phone number, and number of people to guy@pelicanengineering.com.

Guy Van Meulebrouck PE
Consulting Engineer
guyvanm@comcast.net

STOP THE MOISTURE, STOP THE MOLD!

AIR CONDITIONERS ONLY A FINGER IN THE DIKE

Mold generally won't grow without water. If you can keep your building dry, you probably won't have to worry too much about mold. Air conditioners can remove water, but they're only a finger in the dike if the building enclosure can't keep out water. A group of Ft. Myers area air conditioning engineers has organized a seminar on the Building Envelope and on preventing moisture.

The SW Florida Chapter of ASHRAE, the HVAC engineer's technical society, will be conducting their 8th annual Building Envelope Seminar on February 10, 2006 at the Holiday Inn Bell Tower in Fort Myers. This series of seminars began in 1998.

DR. JOSEPH LSTIBUREK TO CONDUCT SEMINAR

As in past years, the presenter will be Dr. Joseph Lstiburek, the preeminent North American authority on building science—keeping heat, air, radiation, and moisture out of buildings and protecting building materials from water-damage. He did a study last year for the Florida Home Builder's Association on water-intrusion resulting from the four 2004 hurricanes.

This is a one-day program for architects, builders, and building officials created by air conditioning engineers. HVAC contractors and suppliers that have an interest in indoor air quality and preventing or remediating mold will also find it interesting.

VENTING ATTICS AND CRAWL SPACES: A BAD IDEA

Over the years, the seminar has covered vented attics, crawl spaces, walls, windows, and moisture intrusion in-general. This year they start the cycle all over again with an overview of the Building Envelope—KEEPING THE INSIDE IN AND THE OUTSIDE OUT—an update on the state-of-the art, based upon research completed in the last 10 years.

If you want to know what's new in the world of claddings, wraps, insulation, moisture retarders, and ventilation; not to mention those 21st Century building materials, wood, masonry, concrete, and stucco; if you are interested in knowing more about sealed vs. vented attics, or foam attic insulation; or you want to hear about changes in the 2004 Florida Building Code regarding attic venting requirements; this might be a good seminar to attend.

FEE AND CONTINUING EDUCATION CREDITS

The fee will be \$175 per person. Continuing Education credit will be offered, but CEU details were not available at press time. See the seminar brochure for more information. Contact committee chair Andrew C. Ask, P.E., 239-980-0028, aaskpe@swfla.rr.com, for more information.

ASHRAE 2005-06 Chapter Meeting Dates

Meeting Date	Program	Speaker / Representative	Location
Sep. 14, 2005	Thermographs and it's Application to HVAC	Jim Thompson	Bogert's Chop House
Oct. 12, 2005	ASHRAE 62-01 ADDENDA "N"	Charlie Waddell	Bogert's Chop House
Oct, 2005	Golftoberfest	Jason Grabowski	TBA
Nov. 9, 2005	Air Conditioning Systems in Hospitals & Critical Health Care	Essam Eldin Khalil, Ph.D	Bogert's Chop House
Dec. 9, 2005	Everblades Hockey Game and Dinner		Germain Arena
Jan. 11, 2006	Ammonia/Carbon Dioxide Hybris Systems	Will Stoecker, Ph.D	Bogert's Chop House
Feb 24 2006	Solid Waste Energy Plant Tour	Guy Van Meulebrouck 3:00PM	Solid Waste Energy Plant
Mar. 8, 2006	Mold Ltigation	Mike Green	Bogert's Chop House
Apr. 12, 2006	TBA		TBA
May, 2006	8th Annual Backwater Fishing Tournament	Dean Sanders/ Keith Enwright	TBA
May 10, 2006	Improving Efficiency in K-12 Schools District Wide	Verie William	Bogert's Chop House
TBA – May	6th Annual 8-Ball Pool Tournament	Lisa Duritsch	Miscue Lounge
TBA - June	President's Party		TBA
Aug 2006	Region XII CRC	Done Pine	Sanibel Harbor Resort

A.S.H.R.A.E - Southwest Florida Chapter 2004-2005 Officers and Committee Directory

<p>Chapter Officers:</p> <p>President John Pennington Ph. 941-627-8881 ext. 215 Fax. 941-743-9475</p> <p>President Elect Kurt Vega Ph. 239-693-7200 ext. 218 Fax. 239-693-2431</p> <p>Vice President Mike Myers Ph. 239-275-4240</p> <p>Treasurer Sam Moreland Ph. 239-278-1988</p> <p>Secretary Robert Lesnau Ph. 239-275-4240</p>	<p>Fax. 239-694-4633</p> <p>Mark Brant Ph. 239-939-9098 Fax. 239-939-9038</p> <p>Gary Griffin Ph. 239-332-4646</p> <p>ASHRAE 1-800-527-4723</p>	<p>Chapter Committee Chairpersons:</p> <p>Chapter Technology and Transfer Committee (CTTC) Randy Munsey Ph. 239-997-5100 Fax. 239-997-5101 Email: rmunsey@airsourcecorp.com</p> <p>Programs Roger Coll Ph. 239-275-6358</p> <p>Technical, Energy, and Governmental Activities</p> <p>Membership Keith Enwright Ph. 239-243-6811</p> <p>Resource Promotion Mike Myers Ph. 239-275-4240</p>	<p>News Letter Editor Kurt Vega Ph. 239-693-7200 ext. 218 Fax. 239-693-2431</p> <p>Honors and Awards Gary Griffin Ph. 239-332-4646</p> <p>Historian Lawrin Ellis Ph. 239-936-4003 Fax. 239-936-0819</p> <p>Student Activities Robert Lesnau Ph. 239-275-4240</p>
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Chapter Board of Governors:

Guy Van Meulebrouck
Ph. 239-693-6120

Chapter Committee Chairpersons: