

Florida West Coast Chapter  
ASHRAE  
3203 Queen Palm Drive  
Tampa, Florida 33619



## Keeping it Cool with ASHRAE

### Special points of interest:

- > ASHRAE Shrimp Boil on Friday April the 8th! RSVP ASAP!
- > Last FWC Chapter Meeting of the Year (May 17, 2011) with Ray Patenaude talking about Building Envelopes and Pressurization (Past President's Night)



## From the Desk of the President

In case you didn't know, I'm a big fan of scotch. OK, this article is not about scotch. I did however try and find a correlation between HVAC and my favorite evening libation but I was unsuccessful. Anyway, scotch good. I did, however, stumble upon some very interesting information about the term "air conditioning".

Stuart W. Cramer was born in the town of Thomasville North Carolina in 1868. Cramer received an education from the United States Naval Academy. In 1895 he established his own business and for the next ten years designed and installed over 150 machines to "air condition" cotton mills across the south. But it's not the air conditioning you might think would EVER be used in the south.

Mr. Cramer pioneered humidity control and ventilation equipment. He found that he needed to add moisture to the air in his textile mills. He combined moisture and ventilation to "condition" his facilities as well as roughly one third of the cotton mills across the south. He coined the term "air conditioning" in a patent he filed for in 1906 as an analogue to "water conditioning" which was a process that made textiles easier to process. Through his equipment he was able to condition and control the humidity levels in his factories via evaporative cooling. Yes, swamp coolers.....in the South.

Willis Carrier adopted the term and went on to include it in the name of his company, The Carrier Air Conditioning Company of America. Before his death in 1940, Stuart Cramer had received sixty patents, eleven of which were in the HVAC field.

Be sure to join us on March 15<sup>th</sup> for our next meeting. Doug Kirchner from RenewAire will be discussing Using AHRI Certification Data to Select Energy Recovery Ventilation Equipment.

Also, mark your calendars for April 8<sup>th</sup>, 2011 for the annual FWC Shrimp Boil.

**Jeff Ross, FWC President (2010-2011)**

**DID YOU KNOW?** Multiply your Research Contribution Impact! Make a research contribution through the ASHRAE Foundation of at least \$2000 and the foundation will make a research contribution in your name annually of 5% of the original amount. You and the chapter get credit for both the original contribution as well as the annual contributions every year! Go to <http://foundation.ashrae.biz/> for more information.

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## Programs

The Florida West Coast Chapter of ASHRAE is proud to have Mr. Doug Kirchner from RenewAire coming to speak to our chapter about:

### AHRI CERTIFICATION DATA TO SELECT ENERGY RECOVERY VENTILATION EQUIPMENT

Doug Kirchner is the Southern Regional Sales Manager for RenewAire. And has over twenty years experience in sales and sales management in the Process Equipment, Pump/Water Systems and the HVAC markets. Mr. Kirchner Graduate of the University of Wisconsin Stevens Point in 1989 and has been the Southern Regional Manager with the Madison, WI based RenewAire LLC since 2010.

Be sure to RSVP early as this meeting will sell out and we have limited seating. Please send your RSVP's to me at [shawn.jeffrey@kpiengineering.com](mailto:shawn.jeffrey@kpiengineering.com)

**Shawn Jeffrey, Jr.**  
**FWC Programs Chair (2010-2011)**

## What is Chapter Technology Transfer Committee

The **Chapter Technology Transfer Committee (CTTC)** provides efficient and effective transfer of current and relevant information throughout the HVAC&R industry to and from the chapters. CTTC develops and maintains high quality and readily available tools to enable chapters to offer information and attractive industry-related information and programs to all segments within the HVAC&R industry.

Areas of responsibility include:

- Energy
- Government Affairs
- Programs
- Refrigeration
- Technical

It is expected these responsibilities will be shared by 2-5 people, depending on the size of the chapter.

Here is a list of CTTC Activities and Programs:

- Webcast
- Government Activities
- Technical Activities (TC and TG)
- Refrigeration Activities
- Energy Strategy
- Standards
- ASHRAE Distinguished Lecturer Program
- Chapter Programs
- ASHRAE Hot Topics
- CTTC Awards Program

Internet Resources available for more information:

CTTC related web pages:

- [www.ashrae.org/cttc](http://www.ashrae.org/cttc)
- [www.ashrae.org/technologyawards](http://www.ashrae.org/technologyawards)
- [www.ashrae.org/distinguishedlecturers](http://www.ashrae.org/distinguishedlecturers)
- [www.ashrae.org/advocacy](http://www.ashrae.org/advocacy)

CTTC Regional web page: [www.ashrae.org/region12.org/?page\\_id=19](http://www.ashrae.org/region12.org/?page_id=19)

Facebook Page: ASHRAE Region XII CTTC Page

By Ricardo Esbri, ASHRAE

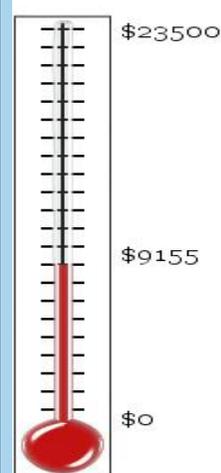
## Research Promotion

Let me start by personally thanking each and every investor both individual and corporate, it is because of you that the Florida West Coast Chapter continues to set the standard and lead the way, not only in Region XII but on a national level. As of February 28, 2011 the Florida West Coast Chapter has collected over \$ **9,155.00**, please be sure to recognize those investors that are listed in this newsletter.

Please make your contributions early this year either by check 'Payable to ASHRAE Research' and turn them in to me or if you prefer you can make online donations at [https://www.ashrae.org/aboutus/resource\\_promotion.asp](https://www.ashrae.org/aboutus/resource_promotion.asp).

If you make a donation online, please forward me a copy of the emailed invoice so I can ensure that proper credit is given at [jasoncproctor@gmail.com](mailto:jasoncproctor@gmail.com).

**Jason Proctor FWC Membership Chair  
(2010-2011)**



## Refrigeration—The Cooling Season is Here!

Spring is already here. With 80 degree weather in February, there is a good chance your home air conditioning unit has already seen some cooling mode use. Here is a short list of things to check in order to keep your home AC system in top shape. Below is an expanded checklist from an article I wrote a couple years ago:

**Change Out Dirty Air Filters** – This is one of the simplest AC maintenance items but is often the most neglected. I recommend marking your calendar 3 months in advance when your next air filter change out should be immediately after changing out your air filter.

**Proper Refrigerant Charge** – Have a qualified AC technician check to see that you have an adequate charge of refrigerant for the size of your unit. A general rule of thumb is 3 to 4 lbs of refrigerant for each ton of cooling. So, if you have a 3-ton unit, you should have roughly 9 to 12 lbs of refrigerant (using R-22 as a reference).

**Clean Out the Condensate Pan, Trap and Piping** – This is the part where borrowing your neighbor's wet/dry shop vacuum comes in handy. Cap the outlet to your condensate piping, add water and vacuum out the junk from the condensate trap clean-out connection. If you do not have a condensate trap clean-out, you will need to connect the shop vac hose to the condensate pipe outlet. Don't forget to vacuum out the drain pan too. It's usually full of funky stuff!

**Fix Refrigerant Leaks** – Again, have a trusted AC technician "sniff" your heat transfer coils, refrigerant pipes and fittings. A common leak is at the thermal expansion valve (TXV). You can often tell simply by touching it to see if there is an oily residue. If so, it could be a sign of a leak since the oil to lubricate the compressor is usually flowing freely with the refrigerant.

**Fix Leaky Ductwork** – All ductwork leaks. Some leak more than others. A tight duct system in a residential application may leak up to 3-5% of the supply air. The good thing is that most electric utilities have generous rebate programs to encourage their customers to have their ductwork inspected and sealed if needed. See the following websites based on who your local electric utility is:

[http://www.fpl.com/residential/savings/energy\\_advisor/cooling\\_heating/ducttest.shtml](http://www.fpl.com/residential/savings/energy_advisor/cooling_heating/ducttest.shtml)

<http://www.progress-energy.com/custservice/flares/energyhome/duct.asp>

<http://www.tampaelectric.com/residential/saveenergy/ductwork/>

**Clean the Evaporator and Condenser Coil** – I recommend taking a trip to the local hardware shop and buy a spray can of coil cleaner. Pop off the hex bolt fasteners on the coil panel to your indoor air handling unit and follow the directions on the can of coil cleaner. (If this mechanically inept engineer can do it, anyone can.) Plan B would be to fall back on your trusted AC technician. The outside condenser coil can be cleaned with a low pressure garden hose.

**Lubricate the Motors** – The indoor and outdoor fan motors need occasional lubrication. It's an easy enough job to do if you can locate the fan motor oil ports. The indoor fan motor is accessed the same way the evaporator coil is. The outdoor fan motor is usually accessed by removing a few fasteners at the top of the wire grill and swinging the motor/grille assembly open. The oil ports are usually underneath.

This is not an exhaustive list, but it should help to get your home A/C unit ready before the summer heat wave arrives.

**Adam Parke, Refrigeration Chair (2010-2011)**



## ASHRAE Research— Working to Improve

Residential and commercial air conditioning and refrigeration applications!

Proposed Research project, *1580-TRP, Study of Input Parameters for Risk Assessment of 2L Flammable Refrigerants in Residential Air Conditioning and Commercial Refrigeration Applications*:

Refrigerants with mild flammability, but very low global warming potential (GWP) have been recently identified which could have a significant environmental benefit in reducing global warming impact of refrigerants. For example, HFO-1234yf with a GWP of 4 has been identified as the leading candidate to replace HFC-134a in automotive air conditioning and has been found safe to use based on extensive automotive industry risk assessments. Under a new ISO-817 standard, class 2 flammable refrigerants will be divided into “2” and “2L” with 2L representing refrigerants that have mild flammability. This new classification may eventually be adopted by ASHRAE Standard 34 and HFO-1234yf would be considered Class 2L. Another low GWP refrigerant trans-1234ze also has potential to be used in some air conditioning systems which require improved high ambient temperature performance.

The objective of this project is to develop critical input data for 2L refrigerants which can be used in risk assessments for residential air conditioning, heat pumps and small commercial refrigeration applications in occupied spaces. Large supermarket racks, and sea containers could be a potential phase 2 project. Tasks will include obtaining information on leak rates and frequencies for air conditioning and small commercial refrigeration equipment, identifying potential ignition sources, determine refrigerant concentration profiles during leaks to assess when the LFL is exceeded, and conducting ignition experiments.

To read more about this project, current projects, or other proposed projects visit the ASHRAE webpage.

## Message to Donors and Non-Donors

Help us support the research of tomorrow TODAY!

Have you ever imagined this Society, or even the world without ASHRAE Research? Without the knowledge gained from Research, both would be practically unrecognizable...

How often do you reference the ASHRAE Handbook? What aspects of your job are made easier, or even possible, because of it? Well, without the support of Members like you the ASHRAE Handbook would not be as complete as it is today. [Take a look for yourself!](#)

As winter rages outside, many of us take for granted the automatic and safe warmth of our electric and gas heaters. However, without ASHRAE Research, how would we heat our homes?

Without ASHRAE Research, we would not enjoy many of the creature comforts we so often take for granted. And without your support, the research of tomorrow won't be possible! We need your support to fund the research of tomorrow TODAY! Please continue to support ASHRAE Research through your Dues and Chapter events.

For more information on Research and what is being done to improve the world around us please visit us on the web [HERE](#).

Help us fund the research of tomorrow TODAY! Please make your contributions early this year either by check 'Payable to ASHRAE Research' and turn them in to me or if you prefer you can make online donations at [https://www.ashrae.org/aboutus/resource\\_promotion.asp](https://www.ashrae.org/aboutus/resource_promotion.asp).

Contributing to ASHRAE Research is easy – give with your annual Dues, give at a Chapter meeting, give at a Chapter special event, give online [HERE](#), or send your contribution directly to ASHRAE Headquarters:

**ASHRAE Research**  
**1791 Tullie Circle, NE**  
**Atlanta, GA 30329**

## ASHRAE Online Courses

Two courses related to high-performance building design are being offered as part of ASHRAE Learning Institute's (ALI) spring online series. Twelve online instructor-led short courses run from late March through early May and are available to those interested in expanding their knowledge of the HVAC industry and keeping up to date with the latest technology and their applications. Many popular courses are offered, several of which include updated material.

Basics of High Performance Building Design, taking place April 27, focuses on the basic application of ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, and ANSI / ASHRAE / USGBC / IES Standard 189.1-2009, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, to achieve high-performance building design. The course focuses on the differences in purpose and requirements between Standards 189.1 and 90.1.

"The Basics of High Performance Building Design course will help you earn the 'three greens'," instructor Tom Lawrence, Ph.D., P.E., University of Georgia, said. "First, you will be helping the planet stay green by reducing the energy, water and materials required to build and operate a facility. Second, you will be left with a facility that will save you 'green' due to lower operating costs and more efficient operations. Finally, you will have a building that will leave its neighboring buildings 'green with envy' when they know that they have a lower market value compared to their high performance neighbor."

Advanced High Performance Building Design, May 4, focuses on advanced concepts involved in applying Standards 90.1 and 189.1 to achieve high-performance building design. More emphasis is placed on case studies to move beyond the minimum requirements of these standards.

"In many instances, building design objectives tend to regard minimum code requirements as a ceiling of quality rather than a minimum requirement," instructor Jeff Ross-Bain, P.E., ASHRAE-Certified Building Energy Modeling Professional, Ross-Bain Green Buildings, LLC, said. "However, the development of high-performance green building methods, strategies and technologies has given designers the tools to reach for energy efficiency levels in buildings that exceed these minimum requirements and, in fact, are beginning to approach net-zero-energy building status. In order to advance the performance of buildings, it is essential that the engineering community rethink 'business as usual' and begin to maximize the performance of buildings – beyond the codes. We have tools, resources and real-world examples available to help us achieve those goals. The advanced energy design course will give the attendees an insight into ways in which these principals can be integrated into practice."

Courses and dates are:

March 28	Using Standard 90.1 to Meet LEED® Requirements
March 30	Fundamental Requirements of ASHRAE Standard 62.1-2010, Ventilation for Acceptable Indoor Air Quality
April 6	Application of ASHRAE Standard 62.1-2010: Multiple Spaces Equations
April 11	The Commissioning Process and Guideline 0, The Commissioning Process (co-sponsored with the Building Commissioning Authority, Illuminating Engineering Society of North America and the National Environmental Balancing Bureau)
April 13	Avoiding IAQ Problems Using ASHRAE's New IAQ Guide
April 18	Understanding Standard 189.1 for High Performance Green Buildings
April 20	District Cooling & Heating Systems: Central Plants

\*\*\*\* See article continuation on Page 5.

## ASHRAE Online Course Continued . . .

April 25	Understanding Air-to-Air Energy Recovery Technologies and Applications
April 27	Basics of High Performance Building Design
May 2	Complying with Standard 90.1-2010 HVAC/Mechanical
May 4	Advanced High Performance Building Design
May 11	Complying with Standard 90.1-2010 Envelope/Lighting

The three-hour courses are taught in real-time, from 1 p.m. to 4 p.m. EDT. Either three professional development hours or American Institute of Architects learning units or 0.3 continuing education units are available for each course.

Those who sign up for courses before March 18 receive a reduced registration fee. A 20% discount is also available to participants who register for courses with related topics.

A full list of courses and registration information can be found at <http://www.ashrae.org/onlinecourses/>

**ASHRAE Online Courses Feature High-Performing Guidance**  
 BY RICARDO ESBRI, ON FEBRUARY 27TH, 2011

## 2010-2011 ASHRAE RESEARCH Florida West Coast Chapter Contribution Form

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): \_\_\_\_\_

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

Jason Proctor  
 6723 Summer Cove Drive  
 Riverview, FL 33578



Florida West Coast

CHAPTER

## Past Presidents

1957-58 Karl K. Hickman	1984-85 Charles E. Langbein
1958-59 Sam F. Graziano	1985-86 Thomas H. Williams
1959-60 Julian Johnson	1986-87 Caire A. Boe
1960-61 Ken Whittington	1987-88 Frank Grandinetti
1961-62 Mark E. Mooney	1988-89 Carl B. Lawson
1962-63 James A. Hargan	1989-90 Robert M. Little
1963-64 Daniel R. Manrique	1990-91 Edward C. Spivey
1964-65 E. J. Bauerlien	1991-92 Robert P. Sutton
1965-66 Henry Graham	1992-93 Roger B. Redman
1966-67 Richard Kohle	1993-94 Stephen A. Chittenden
1967-68 Lamar King/Leland B. Menard	1994-95 William M. Slade
1968-69 Ed Fuller	1995-96 Juan A. Soler
1969-70 William A. Smith	1996-97 Timothy J. Citek
1970-71 Fareed T. Ossi	1997-98 Mark Smith
1971-72 Lee Bendall	1998-99 Joseph Griner, III
1972-73 John Degian	1999-00 Colleen Smith
1973-74 Mark Chambers	2000-01 John W. Wells, III
1974-75 Charles "Stan" Weaver	2001-02 Gary Stenlund
1975-76 Charles D. Jacobs	2002-03 Bill Wright
1976-77 Peter Scott	2003-04 Don Crosby
1977-78 Ray Rinke	2004-05 Ted S. Hansen, Sr.
1978-79 Lloyd H. Biossoneault	2005-2006 P.J. Crespo
1979-80 James H. Carroll, Jr.	2006-2007 Dan Herrera
1980-81 S. Michael Tappouni	2007-2008 Jennifer Isenbeck
1981-82 Alberto J. Sanchez	2008-2009 Debie Horsey
1982-83 James L. Repp	2009-2010 Drew Elsberry
1983-84 Rodney C. Thomas	

## TEGA Update

Well, another year has come and gone, and we're half way through another ASHRAE year... how time flies when you're having fun!

It has been a while since the FWC has entered a project in the regional technology award competition, and the chapter would like to recognize the work of our engineering community by submitting a project for the 2010-2011 competition. The regional competition submission is very easy and it is not a time consuming endeavor; give me a call if you need further info. Anyone care to make a run for the Gold? Speaking of Gold...

### GSA Moves to LEED Gold Standard for All New Federal Buildings

According to a recent DOE press release (<http://bit.ly/cFi2o5>), the U.S. General Services Administration (GSA) is upgrading the requirement for new federal building construction from LEED Silver to LEED Gold certification. The new requirement will also apply to substantial renovation projects. GSA announced on October 28 that the higher rating would be reflected in GSA's Facilities Standards for the Public Buildings Service by the end of calendar year 2010. GSA uses the Leadership in Energy and Environmental Design, or "LEED", Green Building Rating System of the U.S. Green Building Council to evaluate and measure achievements in sustainable design. For projects funded prior to FY 2010 that are now being designed, GSA is requiring that LEED Gold prerequisites and other specific requirements be incorporated into ongoing designs whenever possible after considering budget and schedule constraints.

Make sure to keep those government contact emails coming in!

**Joe Souza, TEGA Chair (2010-2011)**

Your Florida West Coast Chapter website has been updated and is looking for more content! Is there information you would like to see made available online? Do you have questions about the Florida West Coast Chapter? Let us know! Feel free to email your Cyber Chair, [Jason Babinec](mailto:Jason.Babinec) with any concerns or comments.

This home page is maintained by the Florida West Coast Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. ASHRAE chapters may not act for the Society and the information presented here has not had Society review. To learn more about ASHRAE activities on an international level, contact the ASHRAE home page at <http://www.ashrae.org>.

## Board Members, Committee Chairs and Contact Info:

<u>Jeff Ross</u> President 813-918-8252	<u>Shawn Jeffrey</u> Pres. Elect/Programs 813-731-1062	<u>Jason Proctor</u> V.P./Research Promotion 813-917-1648	<u>Philippe Jean</u> Membership/Education 813-541-3516	<u>Joe Souza</u> Treasurer/TEGA 813-309-2155	<u>Joe Cox</u> Secretary/Student Chair 813-763-9654
<u>Debie Horsey</u> YEA Chair 813-748-9406	<u>Dan Herrera</u> Historian 813-839-0506	<u>David Henry</u> Governor 813-310-8977	<u>Adam Parke</u> Refrigeration 813-228-1755	<u>Mike Costello</u> Publicity/Governor 813-300-4662	<u>Michael Cowles</u> Newsletter/Governor 813-241-6488
<u>Drew Elsberry</u> Nominating/Governor 813-267-0973	<u>Ike Crimm</u> Special Events 813-758-2749	<u>Leon Boe</u> Reception 813-879-0383	<u>Jason Babinec</u> Cyber Chair 863-581-6967	<u>Jason Proctor</u> Chapter Roster 813-917-1648	<u>Ike Crimm</u> Nominations/Governor 813-635-2271

**Florida West Coast Chapter  
Research Promotion  
Contributors for 2010-2011**

**Silver \$1,000-\$ 2,499**

**Air Mechanical & Service Corporation  
Dan Rogers**

**Bronze \$500-\$999**

**Advanced Automation Systems**

**Antique \$250-\$499**

**Original Solutions  
Consulting Engineering Associates  
Slade Ross  
Shawn Jeffrey  
Commercial Products Corporation  
Stan Weaver & Company**

**Honor Roll \$150-\$249**

**Vickery & Company  
Luvata Electrofin  
Southern Independent Testing**

**Individual Honor Roll – Investors \$100-\$249**

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Joe Souza  
Raoul Webb  
Jeffrey Ross  
Carl Lawson  
Thomas H Williams  
John Siegenthaler  
Andrew Elsberry  
Debie Horsey

Murray Woodgate  
Jason Proctor  
Joe Cox  
Phillippe Jean  
John B Siegenthaler  
Robert J Barstow  
Adam Parke  
Ross Montgomery  
PJ Crespo



**Florida West Coast**

**CHAPTER**

## CRC will take Place August 10-13th, 2011 in San Jose, Costa Rica

The Florida West Coast Chapter is very pleased to announce that we will be hosting the 2011 August Chapters Regional Conference at our Section in San Jose Costa Rica. The hotel will be in the capital of Costa Rica, but there will be opportunity to travel and experience the 12 microclimates. The country is about 200 miles wide so there is opportunity to go coast to coast, visit a volcano or extend into the clouds at 12,000 ft.



Mountainside in San Jose, Costa Rica headed to Paos Volcano

### Proposed Agenda

#### Wednesday, August 10, 2011

6:30 PM – 8:30 PM Welcome Reception

#### Thursday, August 11, 2011

10:00 AM – 6:00 PM Registration  
 8:00 AM – 11:00 AM Caucus Region XII  
 11:00 AM – 12:00 PM Executive Session/Orientation  
 12:15 PM – 2:00 PM Presidential Lunch  
 2:30 PM – 6:30 PM Technical Session  
 7:30 PM – 10:00 PM Dinner (Sponsor Rec. & Awards)  
 10:00 PM - ??? Hospitality Suite

#### Friday, August 12, 2011

8:00 AM – 6:00 PM Registration  
 8:30 AM – 12:00 PM Business Session I  
 12:15 PM – 2:00 PM Awards Lunch  
 2:15 PM – 6:00 PM Business Session II  
 3:00 PM – 6:00 PM Hospitality Suite  
 6:30 PM – 7:30 PM YEA Hospitality Hour  
 7:00 PM – 11:30 PM Dinner on Own/Groups  
 10:00 PM – ??? Hospitality Suite

#### Saturday, August 13, 2011

7:30 AM – 9:00 AM Registration  
 8:30 AM – 12:00 PM Concurrent Committee Workshops  
 12:30 PM – 5:00 PM Hospitality Suite

### Information about Costa Rica

The Republic of Costa Rica, meaning “rich coast”, is approximately 0.25% of the world’s landmass (the size of West Virginia), it contains 5% of the world’s biodiversity and almost one quarter of the country’s land is protected national parks. Even though Costa Rica abolished its Army in 1949, the democratic government is run similar to US (three branches) and has its first female President, Laura Chinchilla. About 94% of the population is European decent (whites or mestizos), the literacy rate is 94% and has consistently highly ranked throughout the world for democracy, low poverty and is #1 in the America’s for Environmental Performance. The main cash crops are bananas, pineapples and coffee. For sustainability, Costa Rica is most known as a country that will likely meet **Net Zero carbon emissions** by 2030 or sooner (the government set a goal in 2007 that net zero will be reached by the country’s 200<sup>th</sup> Anniversary in 2021). The most impressive fact is that 98% of Costa Rica’s electricity already comes from renewable energy. Some of Costa Rica’s energy sources include geothermal energy, the burning of sugarcane waste and other biomass, solar and wind energy. However, the largest source of energy is hydroelectricity — its hydroelectric dams provide more than 82% of the country’s electricity. Therefore the production of electricity via waterfalls and other water sources are very dependent on rainfall.

### Hotel—Barcelo San Jose Palacia



The **Barcelo San Jose Palacia** boasts the largest, most prestigious conference center in Costa Rica. With wireless connections throughout the hotel, the Barcelo San Jose Palacia provides modern solutions to increase productivity during your meetings and conventions. With our group ASHRAE rate, the expected cost of rooms will range from \$105-\$150/night. The hotel is fully equipped and the concierge is more than helpful to assist in arranging transportation, tours and recommend restaurants. The airport is about a 20-30 minute ride away.



A stunning view of the active Paos Volcano, just a short drive



# Journey to Near Zero

## Journey to Near Zero

Florida West Coast ASHRAE Chapter Hosts Region XII Chapters Regional Conference, August 2011

# Sponsorships are Needed!

*Have the Opportunity to Advertise throughout Florida, South and Central America!*

FWC ASHRAE is asking for your help with a TAX DEDUCTIBLE monetary contribution to make this event possible. All sponsors will be very well represented at the conference with their names displayed on meeting materials, directories and a banner that will be hung at advantageous spots in the hotel. Further, a custom t-shirt will be given to every attendee that will display all sponsor names (including company logos with a sponsorship of \$1,000 or more). As a sponsor you will be invited to the Sponsor Recognition and Awards dinner at the conference where you will have the opportunity to meet Society Officers and be recognized for your generosity and support. As soon as the sponsorship funds are submitted, your company name will be listed on all CRC correspondence.

**Sponsor Levels are:**

<b>EARTHLY STEWARD</b>	<b>\$5,000</b>
<b>NEAR ZERO HERO</b>	<b>\$1,500</b>
<b>SUSTAINABILITY LEADER</b>	<b>\$1,000</b>
<b>RENEWABLES ACHIEVER</b>	<b>\$500</b>
<b>GREEN GO GETTER</b>	<b>\$250</b>

There are also opportunities to provide items for gift bags.  
 If you are interested in Sponsoring this Event and receiving Sponsor Recognition and Privileges related to sponsorship, please contact:  
 Jennifer Isenbeck ([jisenbec@admin.usf.edu](mailto:jisenbec@admin.usf.edu)) or at 813-731-2203  
 Jeff Ross ([jross@sladerossinc.com](http://jross@sladerossinc.com)) or at 813-250-0488

For more information:  
[www.ashraeRegXII-crc2011.org](http://www.ashraeRegXII-crc2011.org)



Florida West Coast  
 CHAPTER



**ASHRAE - Florida West Coast Chapter** presents the  
**2011 Shrimp Boil @ Davis Islands Garden Club**  
 and **Membership Promotion Night**  
 Friday, April 8<sup>th</sup> 2011 @ 6:00pm – 10:00pm

**Bring your appetite for seafood!**  
 There will be plenty of shrimp and cold beverages for everyone  
 Enjoy the outdoor patio, and music  
 Come enjoy the evening with your local ASHRAE friends  
 ASHRAE Membership not required for attendance  
 If you are interested in becoming a member, please inquire at registration  
**\*All Sponsorship Proceeds benefit ASHRAE RESEARCH**

**Cost of Event:**

- \$30.00 ..... Individual Advance Payment via PayPal or Check  
 Includes: All you can Eat and unlimited beverages for the evening
- \$35.00 ..... Individual Payment Day of Event  
 Includes: All you can Eat and unlimited beverages for the evening
- \$150.00 ..... Corporate Sponsorship of Event  
 Includes the following: Company name/logo recognition on Table Display  
 (2) Shrimp Boil Individual Entry

**Location:** Davis Islands Garden Club  
 81 Columbia Dr.  
 Tampa, FL 33606  
 Ph# 813.251.3123  
[www.dicclub.org](http://www.dicclub.org)



**Registration Information**

**\*Advance Payment saves you \$5.00\***

Submit payment online via PayPal @ <http://www.ashrae-fwc.org/>

Corporation /Name: _____	Attendee Name: _____
Contact and Title: _____	Attendee Name: _____
Mailing Address: _____	Attendee Name: _____
City/State/Zip: _____	Attendee Name: _____
Phone: _____	Attendee Name: _____
Email Address: _____	Attendee Name: _____

**Payment Information**

Type: \_\_\_\_\_ Qty: \_\_\_\_\_ Fee: \$ \_\_\_\_\_

Type: \_\_\_\_\_ Qty: \_\_\_\_\_ Fee: \$ \_\_\_\_\_

**Total Fees: \$ \_\_\_\_\_**

Please make checks payable to **ASHRAE-FWC** and mail to below address:

**ASHRAE-FWC Shrimp Boil**  
**C/O Joe Cox**  
**223 South Rome Avenue**  
**Tampa, Florida 33606**

For more information email questions to: [Jcox@sladerossinc.com](mailto:Jcox@sladerossinc.com)





# ASHRAE Technology Awards

## Show the World You Made It



So why haven't you entered?

Be the winner of the industry's most prestigious honor for efficient use of energy in building and environmental system performance.

The ASHRAE Technology Awards recognize, on a global scale, successful applications of innovative design, which incorporate ASHRAE standards for effective energy management, indoor air quality, and mechanical design.

**Awards are given annually in the following categories:**

- Commercial buildings
- Industrial facilities
- Health care facilities
- Residential
- Public assembly
- Alternative or renewable energy use
- Institutional buildings

ASHRAE would like to recognize our 2009 first place winners:

- **Kenneth Sonmor**—St. Laurent Office Tower/Montreal, Canada
- **Laurier Nicols**—Centre Communautaire de Mississini/Misstissini, Quebec, Canada
- **Thomas Durkin**—HVAC Renovations at George Washington Carver Elementary School Indianapolis, Indiana
- **Jacques de Grace**—Normand-Maurice Building/Montreal, Quebec, Canada



For forms, information and deadlines visit [www.ashrae.org/technologyawards](http://www.ashrae.org/technologyawards)

Contact your CTTC RVC or R. Douglas at ASHRAE headquarters

**Phone:** 678.539.1128 | **Email:** [rdouglas@ashrae.org](mailto:rdouglas@ashrae.org)

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



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# ASHRAE FLORIDA WEST COAST CHAPTER

**MARCH 15, 2011**  
**MR. DOUG KIRCHNER**  
**COLUMBIA RESTAURANT, YBOR CITY**

The Florida West Coast Chapter of ASHRAE is proud to have Mr. Doug Kirchner from RenewAire coming to speak to our chapter about:

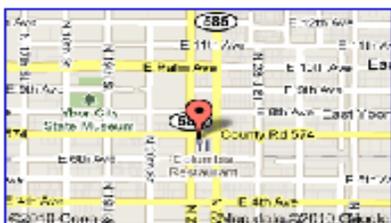
## AHRI CERTIFICATION DATA TO SELECT ENERGY RECOVERY VENTILATION EQUIPMENT



Doug Kirchner is the Southern Regional Sales Manager for RenewAire. And has over twenty years experience in sales and sales management in the Process Equipment, Pump/Water Systems and the HVAC markets. Mr. Kirchner Graduate of the University of Wisconsin Stevens Point in 1989 and has been the Southern Regional Manager with the Madison, WI based RenewAire LLC since 2010.

Please be sure to RSVP early as this meeting will sell out and we have limited seating.

Please RSVP on the FWC website at: [http://www.ashrae-fwc.org/chapter\\_meetings.htm](http://www.ashrae-fwc.org/chapter_meetings.htm)  
 Cost: \$35 thru Paypal or \$40 day of (It is still \$40 day of even if you RSVP but do not pay thru Paypal)



Columbia Restaurant  
2117 East 7th Avenue

Email me with questions at [shawn.jeffrey@koienengineering.com](mailto:shawn.jeffrey@koienengineering.com) or call (813)241-6488

Shawn M. Jeffrey, Sr.  
FWC Programs Chair

**Meeting Schedule:**  
**Board Meeting:** 4:15pm — 5:30pm  
**Registration:** 5:00pm — 6:00pm  
**Main Meeting:** 6:00pm — 8:00pm

Ybor City, Florida 33605



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## MARCH GENERAL MEMBERSHIP DINNER MEETING REGISTRATION ANNUAL JOINT MEETING

**Date:** THURSDAY, MARCH 3, 2011  
 6:00 pm Social (Cash Bar)  
 7:00 pm Dinner & Program

**Place: NOTE LOCATION**  
 HOLIDAY INN SARASOTA AIRPORT  
 8009 15<sup>th</sup> Street East  
 Sarasota, FL, 34243  
 Phone: 800-230-4134

**Program: 5<sup>TH</sup> ANNUAL PANEL DISCUSSION: IMPLEMENTING THE NEW ENERGY CODE**

A panel of engineers, contractors, and architects has been assembled to discuss their role in implementing the changes to the Florida Building Energy Code. This is a joint discussion among members of MACCA, the American Society Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), the American Institute of Architects (AIA), and the US Green Building Council (USGBC).

Bring your questions to ask the panel! Confirmed panel members include **Bob Cochell**, President of Gulf Coast Air Systems and representative to the Florida Energy TAC; **Al LaPera**, Associate and Senior Project Manager TLC Engineering for Architecture and President of ASHRAE Sarasota/Bradenton Section; **Mickey Jacob**, managing principal for Urban Studio Architects and AIA National Vice President; and **Michael Carlson**, President of Carlson Studio Architecture and President of the USGBC – Gulf Coast Chapter.

**Menu:** 12 oz Grilled Rib-eye Steak specially seasoned with herbed butter sauce with roasted potatoes and Chef's choice vegetable  
**OR**  
 Monterey Grilled Chicken topped with barbecue sauce, diced tomato, crisp bacon, Monterrey Jack cheese and scallions with roasted potatoes and Chef's choice vegetable  
 Vegetarian Plate Available upon Request

**RESERVE BY TUESDAY, MARCH 1, 2011**  
 Participating Association Members: \$35 ♦ Non-Members: \$40

CASH or CHECK (made payable to MACCA) at the door OR mailed in advance to MACCA

Company: \_\_\_\_\_ Association: \_\_\_\_\_ Attending (#): \_\_\_\_\_

Address: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

Attendee Names:

Dinner Choice:

\_\_\_\_\_  
 Rib-Eye \_\_\_ Chicken \_\_\_  
 \_\_\_\_\_  
 Rib-Eye \_\_\_ Chicken \_\_\_  
 \_\_\_\_\_  
 Rib-Eye \_\_\_ Chicken \_\_\_

Cancellations must be received in writing no later than noon, Tuesday March 1, 2011  
 All reservations not cancelled by cancellation time will be billed!

Call, Fax, or E-mail Reservation to MACCA:  
 Phone: 727-209-0890 ♦ Fax: 727-578-9982 ♦ E-mail: info@macca.us



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