Main Program: Dehumidification Strategies for High Performance Buildings

As the building industry moves toward a more efficient future the challenges placed upon the standard HVAC system, and the design engineer steadily increase. The load profiles of buildings are changing to become increasingly latent heat intensive requiring careful consideration to achieve acceptable thermal comfort under all operating conditions. The direct expansion comfort cooling equipment commonly available typically falls short of meeting the design latent load in modern buildings. This presentation will cover strategies that can be utilized to achieve efficient moisture removal under a variety of circumstances including investigating if reheat is still required to prevent over-cooling.

Guest Speaker: Andrew C. Äsk, P.E.

Andrew C. Äsk, P.E. is a consulting engineer located in Cape Coral, FL. He specializes in the diagnosing, remediation, and retrofitting of existing HVAC systems for the purpose of improving performance, energy utilization, and Indoor Air Quality, work that now includes Building Science Engineering. His practice includes the preparation of MEP design documents. He occasionally writes for trade publications.

Mr. Äsk has now been practicing engineering for almost 55 years: consulting for the past 35 years, in contracting for the previous 20 years. In addition, he spent 10 years of his youth in the carpenter trade working on barns in Iowa. Major retrofit projects have included a hundred-year old hi-rise in St. Paul, MN; a railroad ship in Lincoln, NE; and several Saks Fifth Avenue stores. The past 25 years have been devoted to solving humidity problems throughout the advancement and application of Building Science; and replacing HVAC components in Southwest Florida Buildings. He is now a part-time application engineering and marketing consultant to Therma-Stor in Madison, WS, with a focus on integrating whole-house dehumidifiers and residential HVAC equipment for optimum moisture removal by the combination of both products.

Pandemic Precautions

SWFL ASHRAE is committed to the health and safety of its members and their families. For the foreseeable future masks will be a requirement for all meetings in accordance with CDC recommendations.

SWFL ASHRAE will be adhering to social distancing guidelines by increasing table spacing, serving individual meals, and having hand sanitizer available.

We ask if you are feeling under the weather or have recently traveled out-of-state or out of the country that you please participate remotely.
Greetings SWFL Chapter,

I hope that everyone had a chance to attend the ASHRAE Virtual Winter Conference last week. There were some great technical programs and committee meetings available to attendees.

We are excited to have our esteemed SWFL chapter brother Andrew C Ėsk for our presentation this month! He will be presenting on dehumidification strategies in high performance buildings. Since we live in a tropical climate and we also still need to strive for our buildings to meet high performance standards this should be a very poignant topic for us here in SWFL. I hope you’ll all be able to join us.

On the student activities front, we have teamed up once again with The Foundation for Lee County Schools in their annual STEM @ work and STEMtastic events. We are working through the details on how to conduct these events virtually but they should both allow for some exciting opportunities to show our current crop of students in Lee County the possibilities available with STEM.

Please check out our upcoming events! A Day at the Range SWACCA Challenge and the SWFL ASHRAE Fishing Tournament are soon upon us!

Government Activities - Gena Knight

ACEEE Releases 2020 State Energy Efficiency Scorecard

The 2020 State Energy Efficiency Scorecard, released in December, analyzes the energy efficiency efforts of all 50 U.S. states and Washington, DC. It tracks policies and programs to reduce energy use, such as adopting or advancing energy-saving targets, vehicle rules or appliance standards. The 2020 Scorecard found that states, many of which have set ambitious climate goals since 2018, had to abruptly shift their focus to mitigate the health and economic impacts of the deadly global pandemic, but some were still able to make progress on energy efficiency. These include California, New York, Washington, Massachusetts and several others. The report includes details on state progress, as well as highlighting a "state to watch" in each U.S. region. The full report and fact sheets for each state can be found here.

Full Article

Membership Promotion - Bill Boga

Hello everyone, I hope all is going well as we continue through this new year. Our efforts to grow our chapter remain in place despite the unfortunate circumstances we find ourselves in. Luckily turnout for the hybrid online/in-person meetings has been higher than I thought and I want to thank everyone for turning out to support the chapter. I encourage everyone to reach out to those that you think might have an interest in joining or even those that might want to learn about the HVAC&R industry. That being said, I’d like to extend a warm welcome to our newest member Mr. Wayne Dean, we are glad to welcome you to the Southwest Florida chapter.

Bill Boga
2020-2021 Membership Chair
Building sector emissions hit record high, but low-carbon pandemic recovery can help transform sector – UN report

CO2 emissions increased to 9.95 GtCO2 in 2019. The sector accounts for 38% of all energy-related CO2 emissions when adding building construction industry emissions. Direct building CO2 emissions need to halve by 2030 to get on track for net zero carbon building stock by 2050. Governments must prioritize low-carbon buildings in pandemic stimulus packages and updated climate pledges.

Nairobi, 16 December 2020 – Emissions from the operation of buildings hit their highest-ever level in 2019, moving the sector further away from fulfilling its huge potential to slow climate change and contribute significantly to the goals of the Paris Agreement, according to a new report released today.

However, pandemic recovery packages provide an opportunity to push deep building renovation and performance standards for newly constructed buildings, and rapidly cut emissions. The forthcoming updating of climate pledges under the Paris Agreement – known as nationally determined contributions or NDCs – also offer an opportunity to sharpen existing measures and include new commitments on the buildings and construction sector.

The 2020 Global Status Report for Buildings and Construction, from the Global Alliance for Buildings and Construction (GlobalABC), found that while global building energy consumption remained steady year-on-year, energy-related CO2 emissions increased to 9.95 GtCO2 in 2019. This increase was due to a shift away from the direct use of coal, oil and traditional biomass towards electricity, which had a higher carbon content due to the high proportion of fossil fuels used in generation.

When adding emissions from the building construction industry on top of operational emissions, the sector accounted for 38 per cent of total global energy-related CO2 emissions.

A research team from the University of Almeria has designed an automatic software program that predicts the right temperature for the users of a building and adapts it to their activity in a specific room. The prototype works with a mathematical model that adjusts the heat according to variables such as the outside climate -to obtain an energy saving of 11%-. The system uses renewable energy installations in an autonomous way to achieve more efficient consumption, reduce CO2 emissions and save costs.

This system analyzes typical days at different seasons of the year and the program decides what temperature and luminance are best suited to each particular room, based on criteria such as weather conditions outside and human activity carried out in each specific room. "Normally, adapting to the thermal and lighting needs of each user at any given time involves more energy expenditure because the user constantly adjusts the air conditioning systems to adapt them to his or her liking, which depends on each person's subjective viewpoint. The aim of this technology is to balance well-being with spending,” Francisco Rodríguez, researcher at the University of Almería, explains to Fundación Descubre.

Our Website has a new face. With the purpose to make our website more flexible and integrated with other platforms. We switch from GoDaddy to Wix. We still in construction phase.

Please remember that domain is www.swflashrae.org
Proudly Invites You to Join Us For Our:

2021 ANNUAL BACKWATER FISHING TOURNAMENT

Saturday
April 24th, 2021

Entry Fee is $100.00 per person

Paid entry includes:
Tournament Entry, Tournament T-shirt, Tickets for Drawings, and Awards Dinner

Please direct all questions to Noe Gamez via phone at (813) 399-2345 or email ngamez@bandiflorida.com

ASHRAE (American Society of Heating, Refrigerating, and Air-conditioning Engineers), founded in 1894, is an international not-for-profit organization with more than 56,000 members from 132 nations. ASHRAE’s mission is advancing the art and science of heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education. A portion of Tournament proceeds are donated to ASHRAE research on behalf of the Southwest Florida Chapter.
MARCH 27, 2021
9:00AM - 6:00PM

A DAY AT THE
RANGE
CHALLENGE

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With already more than 3,000 certifications earned to-date, ASHRAE programs were founded to meet the industry needs of today and provide value to thousands of built-environment professionals, employers and building owners.