



Upcoming Event Excitement!

We have a lot of exciting
events around the corner!

Sustainability Activity

Date TBD

Next Meeting Tuesday, September 10

Harbor Breeze at Patriots Point, Mt. Pleasant

BOG Meeting 5:00-5:30

Happy Hour 5:30-6:00

Chapter Meeting/Dinner 6:00-7:00

\$30/person

[REGISTER ONLINE](#)

Join us on Tuesday September 10, 2019

Natatoriums

HVAC Design for Indoor Pools

Cody Foster, Regional Sales Manager, Seresco Technologies, Inc.

Presentation Summary:

Natatoriums continually top the list as being the most difficult spaces an HVAC professional will design. What makes designing HVAC systems for pools so challenging besides the high humidity levels is that due to infrequency, they aren't designed on a regular basis. This presentation is geared to help engineers and designers identify the key parameters they need to focus on to design a successful HVAC system for conditioning an indoor swimming pool. Along with the key elements there are also updates to codes and advancements in the industry that will be highlighted for anyone who has some background knowledge on the subject to ensure everyone can have a few take-aways.

Speaker:

Cody Foster, EIT

Mr. Foster received his Bachelors of Engineering in Mechanical Engineering from Carleton University in Ottawa, Ontario, Canada. He has spent the last 3 years as a regional sales manager for Seresco covering the Southeast and much of the Midwest, specializing in the design of Natatoriums as well as other high humidity load environments.

Seresco Technologies, Inc. is a leading manufacturer of advanced dehumidifiers and specializes in incorporating its systems in natatoriums to provide state of the art facilities across the country. The company has been very active in ASHRAE since its beginning, contributing new practices and design criteria to the ASHRAE handbooks regarding natatoriums



ASHRAE Research Investors

Thank you for your sponsorship. If you would like to support the chapter, please contact the President.

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CTTC CORNER

For more information about this column,
contact **Gene Brown**
(gene3380@gmail.com).

At our May meeting **David Pelfrey, PE** gave an outstanding presentation:

“Seismic Requirements for Non-Structural Components.”

Considerations include **Risk Category, Seismic Design Category and Spectral Response Coefficient**. For example: In the Tri-County area if there is an earthquake of the same magnitude as the one which hit in 1886, 30 of 108 hospitals would be inoperative. Spectral response coefficient takes into account the natural frequency of vibration of a structure or component and the frequency of vibration of an earthquake.

Risk category takes into consideration how important the building is. Category IV is “critical essential”. Seismic design category A is assigned to buildings with stable soil and low earthquake potential. Category F includes critical buildings over an active fault. Where life safety or toxic substances are involved, a **seismic importance factor** of 1.5 applies. For all other situations, the factor is 1.0

Restraint is required for suspended components over 20 pounds. Base mounted equipment over 400 pounds is required to be restrained. For roof mounted equipment, wind must be considered in selecting restraint. Seismic isolators have a housing surrounding the spring. Vibration isolators do not always have this.

Regardless of size, restraint is required for smoke control duct and for flammable control duct. Equipment of less than 75 pounds which is installed in-line with duct is not required to be restrained separately from duct.

Many buildings are constructed without building **seismic joints**. Most equipment requires a 6-inch pad. Sometimes an 8-inch thickness is required, depending on the depth of the anchor. It is not permissible to fasten restraints to sheetrock. Fasten to metal studs or to approved sheetrock backing which is installed before the sheetrock. It is not allowable to attach pipe to a 4x4 unattached to the roof.

Components must be designated as seismic systems for any application greater than 1.0. **Component certification by a qualified entity** can be based on: 1) analysis; 2) shake table or 3) experience. Contractors are required to submit a letter stating that they are aware of the requirements in the section on special inspectors.

Mr Pelfrey showed a video of a fluorescent fixture falling during an earthquake. It would not have fallen if it had been properly restrained.

On a different topic: some fantastic categories are included in the ASHRAE certification program. Every member should consider becoming certified in one of these areas:

***Building Energy Assessment Professional (BEAP);
Building Energy Modeling Professional (BEMP);
Commissioning Process Management Professional (CPMP);
Healthcare Facility Design Professional (HFDP);
High-Performance Building Design Professional (HBDP); and
Operations & Performance Management Professional (OPMP)***



CHAIR COMMITTEE CONTRIBUTIONS

Regional Update:

All members are encouraged to submit entries for a technology award. This will be a good advertisement for your company and will help our chapter compete for regional awards.

Building Energy Quotients (BEQ). BEQ looks at buildings before they are built and after they are constructed. BEQ gives a list of low hanging fruit for saving energy. The potential for saving energy is typically 30% as compared with a few years ago.

Randy Jones
Treasurer

Please join us at the upcoming CRC in Charlotte September 26th to the 28th, come for the fun, come for the education, and come for the camaraderie.

Event details: <http://www.spashrae.com/CRC2019> (be sure to click through all the pages with the options on the left menu items) **Event registration:** <http://www.spashrae.com/event-3352831>

Hotel reservations: <http://www.spashrae.com/2019-Hotel-Registration>

You can also register the old fashioned way with the attached form and call the hotel for reservations at **1-866-837-4148** and ask them for the "ASHRAE Attendee Room Block".

Contact your Chapter Leaders with any questions, ***see you in Charlotte.***

Steve Marek
Board of Governors

Research Endowments Update:

We would like to thank everyone that helped us reach our goal for 2019, both those that donated and those that helped get donations. Our final tally was \$ 19,216.97. There are some new changes for the year, Honor for individuals has risen to \$ 150 and for organization has risen to \$ 500. Once again, thank you for successful year

David Kauffman
RP Chair

Government Affairs Committee Update:

A new ASHRAE year is upon us! The Government Outreach Committee is open to additional members, so if you are interested in joining, send me an email. The SC Legislature is out of session until January 2020, but that does not mean you can't reach out to your local representatives and inform them of ASHRAE's vast resources (YOU being #1!).

Double check the SC Statehouse website to see if your representative has changed here:

<https://www.scstatehouse.gov/legislatorssearch.php>

Looking forward to seeing everyone at the September meeting.

Pete Conroy
Government Affairs
Committee Chair



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**BOG— Steve Marek, Philip
Runyon, Pete Conroy**

2019-2020 Events

September 10th, 2019 **Meeting @ Harbor Breeze—**

“Natatoriums: HVAC Design for Indoor Pools”

October 8th, 2019 **Meeting @ Harbor Breeze—**

“XXX XXXX”

November 12th, 2019 **Meeting @ Harbor Breeze—**

“XXX XXXX”

December 10th, 2019 **Meeting @ Harbor Breeze—**

“XXX XXXX”

January 14th, 2020 **Meeting @ Harbor Breeze—**

“XXX XXXX”

February 11th, 2020 **Meeting @ Harbor Breeze—**

“XXX XXXX”

March 10th, 2020 **Meeting @ Harbor Breeze—**

“XXX XXXX”

April 14th, 2020 **Meeting @ Harbor Breeze—**

“XXX XXXX”

May 12th, 2020 **Meeting @ Harbor Breeze—**

“XXX XXXX”

What is YEA?

To ensure a bright future for ASHRAE and the industry, the Young Engineers in ASHRAE (YEA) Committee was developed to create programs and develop a path for our young professional members. Any current ASHRAE Affiliate, Associate or Member who is 35 years of age or younger is considered a YEA member, and automatically has a wide variety of programs, events, and opportunities at their fingertips!

