AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Sept 28/2015

Topic

RADIANT COOLING DESIGN PROCESS AND CONTROL OPTIONS

Speaker

Dale Handscomb
Rehau Company

Meeting - Mon Sept 28/2015

MEMBERSHIP NIGHT

5:15 pm Social
6:15pm Dinner
7:15pm Speaker

ASHRAE Member/Guest $50.00 preparment
$60 payment to the door
Student Member/Non-Member $10.00

ADVANCED PAYMENT BEFORE MEETING
by using PAYPAL
use the chapter web site to register and pay
http://LondonCanada.AshraeChapters.org

location:

BEST WESTERN LAMPLIGHTER INN
591 Wellington Rd
London, Ont

President's Message

I am happy to be able to welcome you to the 2015-2016 ASHRAE season. It is an honour for me to serve as president of the chapter in the same year that David Underwood, the fourth Canadian Society president, serves his term. Over the past couple of years we've had the privilege of having David present at a couple of our Chapter meetings and to the student chapter at Western. I wish him all the best in his year as president. This years presidential theme is "making connections". David's presidential address is available in the August 2015 edition of the ASHRAE Journal and I would encourage everyone to read it.

The Chapter Board of Governors attended the Hamilton CRC this past August and enjoyed a refreshing weekend learning more about ASHRAE at a regional level and getting motivated to serve our local members better throughout this upcoming year. We had a total of 8 people from the London Chapter Board of Governors attend. Overall I would say the conference was a success. This year the London Chapter, and more specifically Eric Shaw, received the Gold Ribbon Award for compiling a minimum of 5 years of the Chapters history. A significant emphasis was placed on digitizing all of the available chapters history over this past year and this next year will be spent organizing this history and making it more readily accessible from the Chapters website, although all of this historical data is already available on the website. I would urge anyone who has any further historical data in their possession to pass this along to someone from the Chapter Board of Governors, to be digitized.

We are close to finalizing this years program and I'm looking forward to a great year with a lot of variety. We have two distinguished lecturers and two tours lined up as well as several other interesting topics to look forward to. Please visit the Chapter website for more details. In the next few weeks we will be working to assemble a list of speakers along with their biographies and a picture so that you are able to have a better idea of any of the upcoming meetings for the year.

The September meeting will be a membership night. I would encourage each and every Chapter member to extend an invitation to someone you know who is not already a part of ASHRAE. Let's try and share our story of what ASHRAE means to us and how it has influenced and assisted us throughout the years so that others can see the value and get involved. If you have questions related to membership renewal and membership grades, please direct them to our new Membership Promotion Chair Eric Shaw (eshaw@baymarsupply.com).

Let's remember that this is a volunteer led organization and the success of our Chapter is based on the strength of our membership. If anyone is interested in volunteering please let me know and we will find you a way to serve. Thanks.

Best Regards,
Jordan Foster
Chapter President 2015/2016
ASHRAE London Canada Chapter

Kick-Start Offers

Pay for your meal plan, newsletter advertising, student sponsorships and ASHRAE Research Canada by completing the form on the chapter swe site:
http://londoncanada.ashraechapters.org/

* Take advantage of all five offers and get your name in a draw for a chance to win an ASHRAE London swag package!

SPEAKER

Dale Handscomb
Rehau Compancy

Dale Hanscomb is the Sales Manager in charge of the Building Technology Division of REHAU for Ontario and has been actively involved in Hydronics since 1997. Responsibilities include all aspects of sales, design, and service for REHAU's Radiant Floor Heating Systems, Radiant Cooling Systems, Geothermal Systems, Residential Fire Protection Systems, Plumbing Systems, Energy Transfer Piping, and REHAU Smart Controls (Building Automation System).

He has participated in various organizations over the years including the Canadian Institute of Plumbing and Heating, the Canadian Hydronics Council, the Ontario Hydronics Council, the Hydronics Marketing Group, CASA (Canadian Automatic Sprinkler Association), and as a member of the Technical Committee to update CSA F280.

TOPIC

Radiant Cooling Design Process and Control Options

This presentation provides a fundamental understanding of the options for incorporating radiant cooling into commercial project design. Learning Objectives:
1. Explain the basic principles of radiant cooling and the factors that affect thermal comfort;
2. Discuss how a radiant cooling system can be combined with air handling unit to create a "hybrid" radiant cooling HVAC system which can address the concern of condensation
3. List the factors that affect output capacities of a radiant cooling system;
4. Indicate how a radiant system leads to an improved building environment, in terms of thermal comfort and indoor air quality;
5. State the reasons that a "hybrid" cooling HVAC system can lead to reduced energy consumption;
6. Compare initial investment costs, operating costs and maintenance costs for a "hybrid" radiant cooling system

2016 Winter Conference Registration NOW Open!

Register for the 2016 Winter Conference in Orlando, Florida. Members only pay $395 through November 2, 2015. Download our Sample Letter requesting employer support to attend the 2016 ASHRAE Winter Conference.

Learn more about the conference and registration details on the Society web site

Coming April 2016 - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox
Save the date for the April 21, 2016 ASHRAE Webcast - Making Net Zero Net Positive: Solving the Efficiency & Cost Paradox. This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.

Other Meetings
Jan 23 to 27, 2016 = ASHRAE Winter Conference - Orlando, FL
Jan 25 to 27, 2016 = AHR Expo, Orange County Convention Center, Orlando, FL
Jun 25 to 29, 2016 = ASHRAE Annual Conference - St. Louis, MO
Jan 28 to Feb 1, 2017 = ASHRAE Winter Conference - Las Vegas, NV

Greetings from Research Promotion:

I would like to introduce myself, James Scudamore, as this years Research Promotion chair. I've been working in the industry for ten years, and have been a member of ASHRAE for the past eight. This is my first year sitting on the board and I am excited for the challenges that lay ahead.

Last month I spent the weekend at the CRC in Hamilton getting a good introduction to chapter operations. As I type this I'm sitting in the airport; on my way to centralized training where I will be learning more about the benefits of ASHRAE research and gaining the tools required to have a successful year. I'm looking forward to returning and getting this years campaign rolling. Get your research donations in early as we'll be looking to start strong!

James Scudamore - Research Chair

ASHRAE Sustainability Committee

While still in its infancy ASHRAE London would like to announce the creation of its all new Sustainability Committee. Currently the committee consists of both ASHRAE members and members from the local Sustainability effort in our community. Our current team includes:

Mary-Lee Townsend - Sustainability Coordinator
Fanshawe College, Facilities Operations and Sustainability

Beverley Ayeni BESc.(Eng.), MBA - Manager, Sustainability
Western University, Facilities Management

Ivan Walker, P. Eng - Senior Manager
Fanshawe College, Facilities Operations and Sustainability

Jordan Foster, P.Eng., LEED AP BD+C - Mechanical Engineer, Associate
Chorley + Bisset Consulting Engineers

Phil Cook MBA CET LEED AP - Business Development Manager – Mechanical
E.H. Price | South Western Ontario

It is our plan to host two HVAC&R related sustainability events this 2015 – 2016 year as well as to sponsor some educational seminars with clearly identified sustainability themes. We will also be establishing a chapter users group centered around modelling – likely something that is virtual and asynchronous.

If membership on this committee is of interest to anyone please feel free to reach out to
Jordan Foster at Jordan.Foster@Chorley.com or Phil Cook at pcook@ehpricesales.com.

Job Posting:

If you have a job posting and would like to have listing on the Chapter web site, Newsletter and Email notice, just $100.
Bew sure to contact Newsletter Editor- Tom pollard or Chapter Treasure - Phil Cook

Be sure to check out the latest posting:

CHANGEAIR - Technical Inside Sales
Reporting to Inside Sales Manager, Full - Time Position
see information page - PDF link
http://londoncanada.ashraechapters.org/Job-ChangeAir.pdf
Please forward your resume to Cliff Mabee: cliff.mabee@systemair.net
(posted: Sept 10/2015)

Lighting, Climate Zone Changes Proposed for ASHRAE/IES Energy Standard

ATLANTA – Changes regarding lighting and climate zones are being proposed to the energy standard published by ASHRAE and the Illuminating Engineering Society (IES).

Twenty-three addenda to ANSI/ASHRAE/IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings, are open for public comment starting Sept. 4, 2015. To comment or learn more, visit www.ashrae.org/publicreviews.

Among the addenda open for public comment is addendum ch, which proposes a new set of interior lighting power densities (LPD) limits for both building area and space by space compliance paths. These new LPD limits stems from inclusion of light emitting diode (LED) technology into the space type models that are used to determine appropriate LPD limits for compliance with the standard, according to Eric Richman, chair of the standard's lighting subcommittee.

These LPD limits (watts per square foot) are calculated using IES formulas that relate lighting energy use to lighting quantity based on the application of appropriate lighting technologies into individual space models. These models incorporate efficient cost-effective lighting technology, appropriate light loss factors, and current design practice that incorporate quality design elements.

The new LPD values are generally lower by sometimes small to often significant amounts. The magnitude of the change is based primarily on the amount of LED technology incorporated into the model.

"These proposed changes have been under consideration within the 90.1 Lighting Subcommittee for several years," Richman said. "Inclusion of LEDs were seriously considered for the 2013 version of the standard. However, at the time the changes needed to be processed (late 2012), the cost of LEDs was still relatively high and the variety and depth of available products was not deemed sufficient to incorporate into a mandatory code. We understand that LED technology continues to improve and become even more cost-effective such that by the time these new requirements are required for building projects, their effectiveness and viability on code compliance will be even easier."

Also open for public comment is addendum br, which was developed in response to the publication of ANSI/ASHRAE Standard 169-2013, Climatic Data for Building Design Standards. Standard 169 includes more-recent weather data (resulting in changes in climate zone assignments for some locations, including approximately 10 percent of the 3,000 counties in the United States) and the creation of a new Climate Zone 0. The proposed addendum adds requirements for mechanical provisions.

Under addendum w, which is expected to be published in 90.1-2016, Standard 169 is referenced for climatic data (though a new Reference Standard Reproduction Annex in Standard 90.1 includes extracts from Standard 169). Addendum w proposed criteria for Climate Zone 0 in Standard 90.1 for envelope provisions. Addendum br covers criteria for Climate Zone 0 of Section 6 (HVAC), and for the mechanical systems portions Appendix C and G.

Generally, the new Climate Zone 0 is the hotter portion of the previous Climate Zone 1, which was the warmest climate zone. Cities in Climate Zone 0 include Mumbai (Bombay), Jakarta and Abu Dhabi. There are no cities in the United States in Climate Zone 0; Miami and the islands of Hawaii are in Climate Zone 1. The separation of Climate Zones 0 and 1 allows separate criteria for Standard 90.1 to be developed that are more specific to the hotter regions of Climate Zone 0

See the ASHRAE Society web site: www.ashrae.org/publicreviews

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Compliance Path based on Use of Filtered Recirculated Air Proposed for ASHRAE Residential IAQ Standard

ATLANTA – A new optional credit for improving filtration combined with ensuring sufficient air flow through filters is being proposed for ASHRAE's residential indoor air quality standard.

ANSI/ASHRAE Standard 62.2-2013, Ventilation and Acceptable Indoor Air Quality in Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences. It defines the roles of and minimum requirements for mechanical and natural ventilation systems and the building envelope intended to provide acceptable indoor air quality in residential buildings.

Eight proposed addenda to Standard 62.2-2013 are currently open for public comment. To comment or learn more, visit www.ashrae.org/publicreviews.

Among them is addendum k, which is open for public comment until Oct. 4, 2015. The addendum would create a compliance path based on the use of recirculated air that has been filtered to reduce exposure in the building interior to particulate matter not exceeding 2.5 microns.

"These particles (PM2.5) have been found to be one of the most important indoor contaminants from a health perspective," Paul Francisco, 62.2 committee chair, said. "This change would provide an optional credit for having improved filtration combined with ensuring that sufficient air flowed through the filter. This would be the first time the standard has focused on a specific contaminant."

In addition, addendum v is open for public review until Oct. 19. The addendum sets out requirements for non-continuous ventilation. Whereas the standard has included an option for intermittent ventilation, this proposed change provides calculation procedures for a boarder range of potential operation schedules. It also contains a limit on how much contaminants can increase over a short term due to non-continuous operation to ensure this type of operation does not result in periodic excessive contaminant levels, according to Francisco.

DOE Releases Common Definition of Zero Energy Buildings, Campuses and Communities; ASHRAE Commends Efforts

WASHINGTON, DC – Today the U.S. Department of Energy (DOE) reached a significant milestone in bringing the building community together by releasing a common definition of a zero energy building, or what is also referred to as a “net zero energy” or “zero net energy” building.

After leading an extensive stakeholder engagement process over the past year and a half, the Energy Department released its findings in the recently published A Common Definition of Zero Energy Buildings, which states that a Zero Energy Building is “an energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy.” This definition also applies to campuses, portfolios, and communities. In addition to providing clarity across the industry, this new DOE publication provides important guidelines for measurement and implementation, specifically explaining how to utilize this definition for building projects.

"Reducing energy use in buildings must be a major part of the solution as we work to combat the escalating costs and impacts of climate change," said Brendan Owens, chief engineer at the U.S. Green Building Council, which represents more than 13,000 member businesses and organizations from across the building community. "While we are making significant progress to save energy in buildings, this Zero Energy Building definition developed by DOE helps increase expectations and orient the buildings industry towards even greater achievements. USGBC applauds DOE's effort to define zero energy buildings and we look forward to continuing to champion the cause of building efficiency and renewable energy applications to meet the ambitious goals of this definition."

In collaboration with the National Institute of Building Sciences (NIBS), DOE initiated a process last year to work with a large, diverse set of building industry stakeholders to develop its common definition of what it means to be a zero energy building. Thousands of project teams throughout the country are looking to push the envelope and achieve a zero energy building. In fact, the number of zero energy buildings doubled from 2012 to 2014 across 36 states, according to the New Buildings Institute. The growth of zero energy buildings has highlighted a lack of clarity and consistency across the industry on key definitional issues that increasingly were the source of market confusion, underscoring the need for DOE to help develop a commonly accepted definition and approach.

"NIBS and USDOE have created a set of clear and concise definitions for zero energy buildings that will help to narrow the broad array of terminology currently used in the industry,” said Ralph DiNola, CEO of New Buildings Institute. “These consistent definitions will contribute to the growth of zero energy building construction across this country. NBI supports the definitions as a federal position and will promote this effort through the work we do leading programs, practices and policies to get to zero across North America."

Generally speaking, a zero energy building produces enough renewable energy to meet its own annual energy consumption requirements, thereby reducing the use of non-renewable energy in the building sector. There are a number of long-term advantages of buildings meeting this goal, including lower environmental impacts, lower operating and maintenance costs, better resilience to power outages and natural disasters, and improved energy security.

“We applaud the Department of Energy’s continuing work to promote buildings that use less energy. For more than 150 years, AIA-member architects have worked to advance our quality of life through design,” said Elizabeth Chu Richter, FAIA, president of the American Institute of Architects (AIA). “From designing the next generation of energy-saving buildings to making our communities healthier and more vibrant, the 86,000 members of the AIA shape our future through their work. The quality of this future is wholly dependent on sustainable, resilient buildings that reduce the nation’s reliance on non-renewable energy sources. That is why the Department of Energy’s work is vitally important to the industry and nation as a whole.”

Reducing building energy consumption in new building construction or renovation can be accomplished through various means, including integrated design, energy efficiency retrofits, reduced plug loads and energy conservation programs. Reduced energy consumption makes it simpler and less expensive to meet the building’s energy needs with renewable sources of energy. By clarifying what it means to be a zero energy building, this definition will help more building owners determine if developing a zero energy building is right for them. By creating this common definition for zero energy buildings, building owners and project teams can now better focus their effort on implementing strategies to improve the performance of their buildings.

“The National Association of State Energy Officials (NASEO) commends the Department for taking this critically important step to help define Zero Net Energy,” said David Terry, executive director of National Association of State Energy Officials (NASEO). “For too long, uncertainty in the market place around this issue has been a barrier to many private and state efforts in the move toward Zero Net Energy buildings. This action supports existing state energy office efforts which have resulted in Zero Net Energy schools in Kentucky, state office buildings in Iowa, and new homes in many states. Providing standard definitions will help states and private sector partners expand the pace of Zero Net Energy construction.”

“IBPSA-USA welcomes the development of this industry-standard definition for zero energy buildings,” said Mike Wilson, Executive Director of IBPSA, the US Affiliate of the International Building Performance and Simulation Association. “We intend to promote the use of this definition by IBPSA-USA members, who play a vital role in the development of successful zero energy buildings through the application of building performance simulation.”

“For one hundred and twenty one years ASHRAE has been a national and global leader in standards development that fulfills our mission of serving humanity and promoting a sustainable world. We commend the Department of Energy on its efforts to seek consensus on the issue of energy efficiency in the built environment.” says David Underwood, president of ASHRAE. “The 53,000 world-wide members of ASHRAE have diverse interests in how to approach Zero Energy Buildings but all share a desire to move this goal forward. This definition of Zero Energy Buildings will certainly become one of the tools used by the world-wide marketplace to move towards a sustainable future.”

The Zero Energy Building Definition can be viewed here: http://energy.gov/eere/buildings/downloads/common-definition-zero-energy-buildings.

We are looking for an energetic and motivated individual who is looking to make significant contributions to our team!

changeair
a systemair company

TECHNICAL INSIDE SALES

Changeair a division of Systemair located in Tillsonburg Ontario, is a leading manufacturer of HVAC equipment. As part Systemair, the Changeair plant in Tillsonburg is positioned for continued growth and future opportunities. Systemair has 23 plants across the world. Changeair has been manufacturing in the Tillsonburg region for 24 years.

The ***Technical Inside Sales*** role offers a unique blend of utilizing technical skills with sales activities. The successful candidate will be personable, technical and organized. While performing duties within the role you will work with technical drawings, talk with HVAC market professionals across North America and interact with both Manufacturing and Engineering departments. The Changeair sales season offers both a fast paced environment and a slower time to conduct continuous improvement activities.

Position

- **Inside Sales**
- Reporting to Inside Sales Manager
- Full-time Position
- Company Benefit Plan

Responsibilities

- Support of inside and outside regional sales members (reps, engineers, business partners, team members, etc)
- Prepare and deliver quote packages (quotes range from $5,000 to $2,000,000)
- Clearly communicate technical information to business partners and internal manufacturing team
- Technical and administrative duties
- Primary contact for project details and status from business partners through phone calls and emails
- Responsible for coordinating projects with business partners from the design stage to project completion
- Complete additional duties as required by management

Experience Required

- Experience in electrical, refrigeration, air flow properties or any HVAC disciplines or equipment is not required but is an asset

Education Required

- A certificate or course work in any of the disciplines or trades related to HVAC field
- 2 or 4 year Technical Diploma would be a definite asset
- CAD experience would be advantageous
- Proficient with Microsoft Office Suite

Personal Skills Required

- Excellent analytical and organizational skills with attention to detail
- Good memory
- Read mechanical drawings
- Enjoys computer work with a high level of computer competency
- Must be comfortable and able to talk to business partners in a professional manner
- Comfortable with customers on the phone
- Strong communication skills (written and verbal)
- Willing to work as a team with other team members
- Solid work ethic with an emphasis on quality
- Ability to excel in a fast paced, deadline driven environment
- Ability to work overtime as required

What this job offers:

This job offers a highly skilled, highly motivated person the opportunity of leadership and contribution with a rapidly growing and aggressive company. Already a leader in the target market, we are continuing to focus on product with quality and service in mind, with an emphasis on energy efficiencies and "*green*" technologies. The candidate will be a part of a strong and growing Technical Sales team and will have every opportunity to make significant contributions as the company continues to grow. This is a permanent full time position at our office in Tillsonburg Ontario. It includes a company paid benefit plan and a competitive wage package. If you are the type of person we seek, contact us immediately.

Please forward your resume to Cliff Mabee: **cliff.mabee@systemair.net**