

ASHRAE Ottawa Valley Chapter

Chapter Meeting #6 – Mar. 20th, 2012 (17:30 pm)



Meeting Date:	Mar. 20 th , 2012
Location:	Travelodge Ottawa, 1376 Carling Avenue
Attendance:	Total: 65
Theme:	Students in ASHRAE
Tech Session:	The Design of Air Systems by Joel Primeau
Table Top:	Longhill Energy, HTS Engineering, Digel Air
Program:	Variable Refrigerant Use for LEED Applications
Speaker:	Rob Robertson
Prepared by:	Secretary Steve Moons

Tech Session (16:40-17:30)

Joel Primeau presented a session on the design of air systems, which was attended by approximately 25 people.

Social (17:30 – 18:40)

Business Session (18:40 –18:50)

- President Stephen Lynch welcomed members, and introduced the Board of Governors and the Executive.
- President Stephen Lynch speaks to this month's theme of Student's in ASHRAE
- President Stephen Lynch thanks Joel Primeau for the technical session
- President Stephen Lynch informs the membership that MCA Ottawa Director Bob Martel has passed away. He informs them of the funeral arrangements.
- Mike Swayne informs the membership that Ken Hazell has passed away. He describes his time spent working with Ken, and Ken's impact on the community. A toast is raised to both deceased members of the Ottawa construction community.
- Membership chair Adam Moons welcomes new members Mr. Matthew Desjardins, Mr. Daniel Cousineau and Mr. Daniel Laforge
- Secretary Steve Moons introduces guests.
- President Stephen Lynch discusses the success of the curling bonspiel, and mentions the next ASHRAE social gathering will be the golf tournament, coming up in June.
- Joel Primeau speaks to Carleton University having regained it's student chapter status, and congratulates the faculty advisor on winning an ASHRAE grant.
- President Stephen Lynch mentions the upcoming career fair, and encourages participation for both presenters and attendees.
- President Stephen Lynch then introduces the table tops for the evening. Marc Parent from Longhill Energy speaks about his humidifiers, Rod Lancefield from HTS Engineering discusses Daikin VRF systems, and Dave Digel from Digel Air presents Mitsubishi VRF systems.
- Derek Atkins speaks to the second seminar on ASHRAE 62 to be held in April, with information and registration available on-line.
- President Stephen Lynch asks for suggestions for seminars for next year, and mentions

ASHRAE's DOAS webinar that is happening on Apr. 19th.

- President Stephen Lynch asks Nominations chair Bob Kilpatrick to discuss nominations for the upcoming year. Bob requests that any nominations be sent to the nominating committee. Nominations will be presented at the April meeting, and installation of new members will be done at the May meeting.
- Dinner begins at 7:05. Past president Cathy Godin circles the room for a 50/50 draw benefitting ASHRAE Research

Dinner (19:05 – 19:55)

- President Stephen Lynch asks Joel Primeau to introduce Simone Charon. She speaks about work she has done with Engineers Without Borders, and finding engineering opportunities in sub-Saharan Africa. She requests any donations to help with her work there. ASHRAE OVC presents Simone with a cheque for \$200.
- Joel Primeau asks students from Algonquin College to present their work to date on the 2012 ASHRAE Design Competition. The team is on track for it's submission, and is confident of a successful project.
- Past President Cathy Godin draws the winner of the 50/50, who takes home \$132.
- President Stephen Lynch then introduces the evening's speaker.

Evening Program (19:55 – 20:35)

- Speaker Rob Robertson, an employee of LG spoke to variable refrigerant use for LEED designs.
- The basics of the system involve moving refrigerant in gaseous and liquid state to various evaporator/condenser heads (depending on cooling/heating operation) by use of a variable capacity compressor, independent metering devices and controls capable of ensuring the quality of refrigerant at various stages of the system
- Piping for these systems vary for different manufacturers.
- Expected maximum tonnage of ganged systems is approximately 65 tons.
- Diversity is well managed with these systems as often buildings require both heating and cooling at the same time.
- Indoor units are 10-50% oversized to allow for the movement of refrigerant to the spaces requiring more capacity.
- Oil recovery is attained with a oil return cycle, lasting about 3 min.
- Energy efficiency of the system is very good in both heating and cooling modes.
- The systems can do simultaneous heating and cooling of multiple zones.
- The approximate maximum distance of refrigerant piping is 350 ft. from the 1st "T" for the evaporator.
- The system refrigerant piping is not affected by the vertical position of the compressor / condensers.
- Control options includes BACnet, Lonworks and other proprietary controls.
- The systems can include hot water reheat, low ambient operation, and integrated fresh air options.

- President Stephen Lynch thanked Julian for his presentation and gave him a small gift.
- Meeting adjourned 20:36

Distribution:

All Board of Governors, Webmaster