

THE HOT AIR DIFFUSER IDAHO CHAPTER NEWSLETTER

DECEMBER 2010

VOLUME 17 ISSUE 2



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PRESIDENT'S MESSAGE

Greetings Idaho ASHRAE Members,

We had a great program last month covering flow control in hydronic systems. Big thanks goes out to Flow Design as they flew out Bill at no cost to our chapter.

Randy Reed has another great program lined up for us this month and was able to get the Double Tree Riverside to donate the room to our chapter; he is doing a stellar job for us.

At this past Board of Governors meeting a motion passed to offer two \$500 scholarships for students looking to work in the HVAC industry. We are currently assembling a committee to develop and evaluate the applications. As soon as the details are finalized we will post them on the web site for you to pass along to any deserving students you may know. It is exciting that the Idaho ASHRAE Chapter will be able to help the future generation of local engineers.

Winter is upon us in full force this year so be sure to drive safe out there!

Carl Marcum
President
Idaho Chapter ASHRAE

DECEMBER PROGRAM*

Magnetic Bearing, Frictionless Centrifugal Chiller Systems

This month's seminar will describe how this new green technology works. An improved Integrated Part Load Performance providing annual operating cost savings is experienced by eliminating bearing lubrication.

Overall reliability is improved by eliminating oil heaters, oil coolers, oil pumps and oil piping. There will be a short discussion of the impact of responsible use of refrigerants along with a chart of the newly revised Montreal Protocol Phase Out schedule. A comparison will be made of the performances of water cooled screw machines and standard centrifugal machines against the frictionless machine, while exploring how this technology can deliver sustainable design projects meeting LEED certification criteria.

This seminar has IACET accreditation providing a 0.1 Professional CEU certificate. It also meets the USGBC 1 hour continuing education criteria

**When: Wednesday, December 8th
(11:45 – 1:00)**

**Where: Doubletree Riverside
2900 West Chinden Boulevard
Boise, ID 83714-6629
(208) 343-1871
(Parking is free)**

**What: Magnetic Bearing Chiller Systems
(ASHRAE DL Topic)**

***Please RSVP at www.idahoashrae.com.**



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NEWS FROM THE HOME OFFICE

International Code Council (ICC) Takes Action on ASHRAE Proposals

ATLANTA – International building codes will incorporate requirements from a new load calculation standard from ASHRAE and ACCA as well as match requirements from Standard 90.1 under several recent proposals recently approved by the ICC membership.

Final action hearings took place during the last week of October to determine the final disposition on ASHRAE proposals to the ICC, which develops model codes that may be adopted by code jurisdictions in the United States or internationally. The actions taken will next appear in the 2012 I-Codes – due out in April 2011.

Under a proposal to the International Mechanical Code (IMC), inspection and maintenance of HVAC systems will be required by ANSI/ASHRAE/ACCA Standard 180-2009, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems. The standard establishes minimum requirements for inspection and maintenance of HVAC systems to ensure proper functionality which will save energy and money for the building owner in addition to preventing potential accidents by failing systems.

“Inclusion of Standard 180 in code documents is an important advance,” Robert Baker, chair of the Standard 180 committee, said. “Proper maintenance is critical to preserving an HVAC Systems ability to continue to realize the energy efficiency capabilities that are designed into today’s systems. If we are to realize the vital energy independence goals that we have established, excellence in maintenance will be an important part of the package of things we must achieve.”

“Correctly designing and installing an HVAC system are only the first steps to proper performance of the system,” John Sedine, president, Engineered Heating & Cooling; ACCA chairman of the BOD, said. “An HVAC system must be properly maintained or it does not perform as originally designed; contributing to unhealthy environments, consuming excess energy, and reducing comfort levels. ACCA congratulates the code enforcement community’s adoption of the ACCA/ASHRAE 180 Commercial Maintenance Standard; providing code officials with a nationally-recognized standard to which they can refer. This is an important step toward safer and more efficient commercial buildings.”

Also approved were proposed changes regarding energy stringency based on requirements in ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings. These changes include:

- Adding requirements for areas under skylights, including lighting controls in areas where skylights are used in order to take advantage of natural light in conditioned spaces.
- Modifying equipment efficiency requirements for heat rejection and heat transfer equipment including open and closed circuit cooling towers, chillers, unitary air-conditioning and condensing units, unitary and applied heat pumps, single package vertical air conditioners and packaged terminal air conditioners.
- Modifying the piping insulation requirements

Also related to 90.1 was a proposal that rewrote the majority of the commercial chapter of the IECC. This proposal maintained the reference to the prescriptive requirements of Standard 90.1, and made the following requirements consistent with 90.1-2010:

- Fenestration leakage
- Demand control ventilation
- Energy recovery
- Economizer efficiency
- Lighting controls, including daylight zone controls and manual lighting controls
- Lighting system functional testing
- Building area and space by space lighting power densities

The proposal calls for an additional path of compliance for water-cooled chillers and consolidation of and new requirements for some of the existing categories.

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IMPORTANT DATES

- DECEMBER 8, 2010—ASHRAE MONTHLY MEETING
- JANUARY 12, 2011—ASHRAE MONTHLY MEETING
- FEBRUARY 9, 2011—ASHRAE MONTHLY MEETING
- MARCH 9, 2011—ASHRAE MONTHLY MEETING
- APRIL, 2011—TECHNICAL CONFERENCE
- MAY 11, 2010—ASHRAE MONTHLY MEETING
- JUNE, 2011—ASHRAE GOLF TOURNAMENT

ATTENTION: ASHRAE MEMBERS

The Chapter is now accepting advertisements in the monthly newsletter.

Sponsorship Rates are as follows:

	Der Issue	Annual (9 issues)
Business Card	\$10.00	\$50.00
Quarter Page	\$25.00	\$200.00
Half Page	\$40.00	\$325.00
Full Page	\$60.00	\$450.00

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

New ASHRAE GreenGuide Features Guidance on Sustainable Planning, Carbon, Water Efficiency and Existing Buildings

ATLANTA – The newly published third edition of the ASHRAE GreenGuide: The Design, Construction and Operation of Sustainable Buildings is an updated version of this easy-to-use reference that covers the need-to-know information on what to do, where to turn, what to suggest and how to interact with other members of the design team in a productive way. The book features new information on guidelines on sustainable energy master planning; updates on teaming strategies; information on how issues related to carbon emissions affect building design and operational decisions; building information modeling (BIM); strategies for greening existing buildings; updates on newly developed green building rating systems and standards; and compliance strategies for key ASHRAE standards. Also, the GreenTips found throughout this edition highlight techniques, processes, measures or special systems in a concise format.

“The ASHRAE GreenGuide is a living document meant to be used by proactive design engineers working on green building design projects as part of a team that provides ideas and guidance of what to do, where to turn, what to advise and how to interact with other team members in a productive way,” John Swift, co-author and co-editor of the GreenGuide, said.

A new chapter covers architectural design and planning impacts, including sustainable master planning. Such planning addresses resource use, landscape concerns and environmental, economic and social concerns. A major part of such planning is energy and water use.

“As a smart building services engineer, one must be familiar with the flows of energy from generation through transmissions to consumption,” Tom Lawrence, co-author and chair of ASHRAE’s technical committee on building environmental impacts, said. “Understanding these flows is critical to being able to provide solutions that increase overall system efficiencies and facilitate energy reductions at all levels.”

The cost of the ASHRAE GreenGuide is \$98 (\$83, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

Donate to ASHRAE Research NOW at www.ASRHAE.org/contribute or call Scott Mackay at 343-3663
Or clip and mail the coupon with your check:

Mail check (Payable to "ASHRAE Research") to: ASHRAE RESEARCH c/o Scott Mackay Engineering Incorporated 2222 Broadway Ave. Boise, ID 83706	Your contribution puts our chapter closer to our goal. Please send what you can today! Individual gifts of \$100 or more and Corporate gifts of \$150 or more will receive this year's Commemorative coin and Honor Roll status.				
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