ATLANTA - New requirements to further reduce energy and environmental impacts of buildings are contained in the 2014 version of the green building standard from ASHRAE, the U.S. Green Building Council and the Illuminating Engineering Society.

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, addresses the areas of site sustainability; water-use efficiency; energy efficiency; indoor environmental quality; and the building’s impact on the atmosphere, materials and resources.

The 2014 standard incorporates 67 addenda, reflecting changes made through the public review process since the standard was last published in 2011. Appendix H gives brief descriptions and approval dates of the addenda included in this new edition.

"The new standard updates all of its sections to reflect the latest information available to the committee," Andrew Persily, chair of the Standard 189.1 committee, said. "Compliance with these updated provisions will help further reduce energy and environmental impacts through high performance building design, construction and operation while providing indoor environments that support the activities of building occupants."

Major changes in the 2014 edition include:

- **Energy Performance, Carbon Dioxide Emissions, and Renewables:** Changes and clarifications are included to reflect changes to Standard 90.1. Carbon dioxide emission factors for different energy sources are updated.

- **Indoor Environmental Quality:** Lighting quality is added to the scope of this section, and requirements are added for lighting controls in specific space types. Requirements for air sealing of filtration and air-cleaning equipment are clarified, and new requirements for preoccupancy ventilation and building envelope moisture management are added.

- **Site Sustainability:** All site requirements are now mandatory, with prescriptive and performance options moved to the mandatory requirements. Requirements for stormwater management are enhanced, and new requirements added for bicycle parking and for preferred parking for low-emission, hybrid and electric vehicles. New requirements are added for predesign assessment of native and invasive plants.

- **Water:** More stringent water use requirements are included for toilets, clothes washers, dishwashers and green roofs.

- **Building Impacts on the Atmosphere, Materials, and Resources:** Requirements are updated for areas to store and collect recyclables, including batteries and electronics. Requirements also are updated for construction waste management and for lifecycle assessment. New requirements are added for multiple-attribute product declaration or certification and for maximum mercury content levels of certain types of electric lamps.

- **Construction and Plans for Operation:** Requirements related to environmental impacts associated with idling construction vehicles are updated. New requirements are added to reduce the entry of airborne contaminants associated with construction areas.
Since our last newsletter, the Thanksgiving holiday has passed, and marked the “official” change to winter holidays. This time of the year is usually one for socializing with friends and family, and accompanied by a fair amount of fantastic food. I’m sure all of our members have their schedules booked with a lot of family visits and other social events, but I hope you can find time in your busy schedule this week to join a few of us for our annual winter social meeting and dinner. We’ll be meeting at Fujiyama Steakhouse in Richland. See page 3 of this newsletter for further details.

In other news, our tour of the Pacific Northwest National Laboratory research facilities in November was attended by a few members, and it was a fantastic tour to see some of the lesser-known research projects that affect those of us in the building industry.

Our January program has not been set yet, but we are currently planning to host Bruce Dobbs, the ASHRAE Region XI Membership Regional Vice Chair as a small part of the event. Another newsletter will go out in early January with additional details.

For those of you planning on going to the ASHRAE Winter Meeting in Chicago, Registration is currently open. The Winter and Annual meetings are an important part of ASHRAE’s work in promoting new technologies, discussing current industry issues, and socializing with our fellow professionals. If you haven’t been to one of these larger conferences in the past, I highly recommend it.

I wish everyone a pleasant holiday season and look forward to the coming months of ASHRAE work, and to next year’s golf season.

Message from the President
By Derek Archer

Importance of Refrigeration - and Ice Cream - Focus of ASHRAE Conference Workshop

ATLANTA - From Cherry Garcia to Sea Salt Caramel, Americans love their ice cream. Nearly 9 percent of cow’s milk produced in the United States goes toward making ice cream, and America is the number one consumer worldwide. What better way to illustrate the importance of refrigeration technology, than to explore the process of making this country’s favorite frozen treat?

Doug Reindl and Dan Dettmers' workshop, "I Scream, You Scream, We All Scream for Refrigeration Basics of Ice Cream," is part of the Technical Program at ASHRAE’s 2015 Winter Conference. The Conference takes place Jan. 24-28, Palmer House Hilton, while the ASHRAE co-sponsored AHR Expo is held Jan. 26-28, McCormick Place. Complete Conference information and registration can be found at www.ashrae.org/chicago.

The session explores the process of making ice cream, leads attendees through the cooling load calculations and finishes up with a chance to participate in the ice cream making process.

One catch, however. Attendees have to correctly calculate the cooling load before they can taste the final product, which will be made cryogenically. The workshop starts at 8 a.m. Sunday, Jan. 25.

"We want to reach a younger audience to interest them in the ‘R’ in ASHRAE - refrigeration," Reindl, a speaker at the session, said. "We thought this would be an out of the box way to show them about processes, the science, taste and texture of food, home refrigeration."

His presentation will focus on the methods and cooling loads encountered in the ice cream industry.

Session chair Dan Dettmers notes that while ice cream is one of the simple pleasures of life, it also is one of the most complex frozen products available today.

"Unlike ice, which freezes in a crystalline structure, ice cream is an amorphous solid similar to glass," he explained. "Its structure is primarily air held in a complex lattice of sugars and fats. Likewise, the process of producing ice cream is far more complex than most frozen foods with variations from traditional ice cream to frozen novelty bars and cakes."

Other sessions related to refrigeration include:

- Energy Use Analysis in Retail and Small/Medium Office Applications, Sunday, Jan. 25
- Alternative Refrigerants for Residential Refrigerator-Freezers, Sunday, Jan. 25
- Walgreens Pursuit of a Net-Zero Store, Sunday, Jan. 25
- Refrigeration for Craft Brewing, Monday, Jan. 26
- Demand-Defrost Controller for Walk-in Boxes, Monday, Jan. 26
- Energy Efficiency of Novel and Conventional Compressors using Low-GWP Refrigerants, Tuesday, Jan. 27
- Environmentally Sound Refrigeration, Wednesday, Jan. 28
- Supermarket Hot Gas Defrost Piping Guidelines for Best Performance, Reliability and Leak Reduction, Wednesday, Jan. 28
- Energy Reducing Design Developments for Ice Arenas, Wednesday, Jan. 28
This Month’s Event!

Thank you to everyone who responded to our online poll as to when you would be able to come to a dinner and social event. It helps us plan our events better to encourage the most people we can to attend.

This year’s winter social event will be similar to last year, where those of us who were able to attend met for dinner and a short informal meeting with our Region XI Director and Regional Chair, Kevin Marple. This year, we will simply be meeting for dinner at Fujiyama Steakhouse in Richland. Details below. Hope to see you there!

Mid-Columbia ASHRAE Winter Social and Dinner

WHEN: Thursday, December 11th, 2014. 6:00pm.

WHERE: Fujiyama Steak House, 2522 Queensgate Drive, Suite A, Richland, WA

Cost: $20-$30 and up depending on menu selections.
## Mid-Columbia ASHRAE Chapter

### 2014-2015 Officers/ BOG

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<td>Derek Archer</td>
<td><a href="mailto:dlarcher@meierinc.com">dlarcher@meierinc.com</a></td>
</tr>
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<td>President-Elect</td>
<td>Rahul Athalye</td>
<td><a href="mailto:Rahul.Athalye@pnnl.gov">Rahul.Athalye@pnnl.gov</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Lucy Huang</td>
<td><a href="mailto:Yunzhi.Huang@pnnl.gov">Yunzhi.Huang@pnnl.gov</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Lucy Huang</td>
<td><a href="mailto:Yunzhi.Huang@pnnl.gov">Yunzhi.Huang@pnnl.gov</a></td>
</tr>
<tr>
<td>BOG Member at Large</td>
<td>Weimin Wang</td>
<td><a href="mailto:Weimin.wang@pnnl.gov">Weimin.wang@pnnl.gov</a></td>
</tr>
<tr>
<td>BOG Member at Large</td>
<td>Jay Ashbaugh</td>
<td><a href="mailto:jpasbaugh@energy-northwest.com">jpasbaugh@energy-northwest.com</a></td>
</tr>
<tr>
<td>BOG Member at Large</td>
<td>Jian Zhang</td>
<td><a href="mailto:j.zhang@pnnl.gov">j.zhang@pnnl.gov</a></td>
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<td>Weimin Wang</td>
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<td>Rahul Athalye</td>
<td><a href="mailto:Rahul.Athalye@pnnl.gov">Rahul.Athalye@pnnl.gov</a></td>
</tr>
<tr>
<td>Honors &amp; Awards</td>
<td>Jian Zhang</td>
<td><a href="mailto:j.zhang@pnnl.gov">j.zhang@pnnl.gov</a></td>
</tr>
<tr>
<td>Newsletter</td>
<td>Derek Archer</td>
<td><a href="mailto:dlarcher@meierinc.com">dlarcher@meierinc.com</a></td>
</tr>
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<td>Steve Strecker</td>
<td><a href="mailto:slstrecker@charter.net">slstrecker@charter.net</a></td>
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<td>Position Vacant</td>
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<tr>
<td>Student Activities</td>
<td>Greg Jourdan</td>
<td><a href="mailto:GJourdan@wvc.edu">GJourdan@wvc.edu</a></td>
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## Help Sponsor our Chapter with a Business Card Ad

How would you like to place your business card in front of more than seventy eastern Washington ASHRAE members? For a low $10 an issue, we can place your business card with company logo in a prominent location in our newsletter.

**Interested??? Contact**

Derek Archer at (509) 737-6982

dlarcher@meierinc.com

## Important Notice About Future Meeting Dates

- Regular Mid-Columbia ASHRAE Board of Governor’s Meeting: December 29th, 5pm. Meier Architecture-Engineering Offices, Kennewick, WA
- 2015 Region XI Chapter Regional Conference, Calgary, Alberta, Canada. Spring 2015. Details to be announced.

The Mid-Columbia Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in 1981 in Richland, Washington. We are part of ASHRAE Region XI and represent ASHRAE members in Eastern Washington State.