

# ASHRAE BLUEPRINT

January 2014

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## PRESIDENT'S MESSAGE Rob Marshall

**Chapter Meeting: Wednesday, January 8th, 2014 @ Westward Ho  
Social 11:00 AM, Lunch 11:30 AM, Program 12:00 PM**

**RSVP at the link below no later than 10 AM, Monday, January 6th.**  
<https://www.surveymonkey.com/s/TTP57LH>

ASHRAE Members and Guests,

Happy New Year to all of our members! It's hard to believe that we're now in the year 2014. I hope this will be a rewarding year for each of you. To kick off the new year, I'd encourage you to consider joining a committee of our local ASHRAE Chapter. I'm confident you will find this to be a great way to get to know others in our industry, as well as rewarding for you, personally. We've had such a successful history in our chapter, but we are always in need of new people to step in and bring fresh ideas to our chapter.

We're focusing on IAQ again this month – our guest speaker will be Joe Randolph from Camfil USA. The title of Joe's presentation is: The Air We Breathe – The IAQ Impact of Filtration. You can read more about Joe and see the outline of his presentation below in our CTTC portion of the BluePrint.

Speaking of IAQ, ASHRAE now has their 700+ page Indoor Air Quality Guide available for download, **free of charge**. You can download the PDF document from the link below. I will put a copy of the Table of Contents on each table at January's meeting so that you can see what is included in the guide.  
<https://www.ashrae.org/resources--publications/bookstore/indoor-air-quality-guide>

It's time to start thinking about our Valentine's Day Event. Jeff Horstmeyer has scheduled our social event for Saturday, February 15th at the Olde Towne Dinner Theatre in Worthing, SD. I have attended this event a few times over the years and have always thoroughly enjoyed it (and this is coming from someone that has zero musical or theatrical talent!). Please see the attached Valentine's Day announcement from Jeff. Please note that we have to submit our list of attendees by February 1st so please let Jeff know before then.

We will be handing out Research Promotion Awards at our January meeting. Thank you to all of you that donated last year! Year after year we make our goal

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because of the generosity of our members. A special thank you to Stuart Oster as well for doing such a great job of being our Research Promotion Chair over the past five years.

As always, thanks for your continued support of the South Dakota ASHRAE Chapter!

Rob

## **CTTC** **The CTTC position is open**

We are pleased to have Joe Randolph from Camfil USA as our guest speaker this month. Joe will be speaking on Indoor Air Quality and Air Filtration.

Joe Randolph is currently the Great Lakes Regional Sales Manager for Camfil USA. He has been in the HVAC Industry for the past twenty seven years. He spent ten years as a Licensed Mechanical Contractor in the State of Michigan, ten year as a Sales Engineer for the Carrier Company and six years as their Commercial Sales Manager. He has a Bachelor of Science degree in Business Management and an Associate of Applied Science degree in Energy Management. Joe is also a past VP of Michigan's Air Conditioning Contractors of America and is a member of Eastern Michigan ASHRAE.

Title of Presentation: The Air We Breathe – The IAQ Impact of Filtration

### Outline:

#### The Air We Breathe

- What's in the air
- The IAQ Impact
- Why use air filters

#### ASHRAE 52.2 when & where did it come from

- History of Filter Test Standards
- ASHRAE 52.2-2007 Addendum B
- Appendix J –The addition you need –MERV-A

#### ASHRAE Guideline 26-2008

- How can this guideline change the way you specify and purchase filtration

## **Special Events** **Jeff Horstmeyer**

Please see the attached info on the Valentine's Day Event at the Olde Towne Dinner Theatre.

## **Membership** **Keith Luke**

If you know of anyone that may be interested in joining ASHRAE, be sure to tell them about ASHRAE and invite them to a meeting. Membership information can be found at [www.ashrae.org/members/](http://www.ashrae.org/members/) or call Keith at 605-261-7086 with questions.

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## Grassroots Government Advocacy

Brian Miller

(Information provided from Mark Ames - ASHRAE's Government Affairs Office in DC)

### *President Obama Issues Memo on Federal Leadership in Environmental, Energy, and Economic Performance*

U.S. President Barack Obama sent a new [memo](#) to the heads of federal agencies and departments that establishes new goals for renewable energy and energy management practices. Of particular interest may be section 3 of the memo, "Building Performance and Energy Management", in which agencies are required to continue installing building energy meters and sub-meters (as required by the National Energy Conservation Policy Act), install water meters where cost-effective and appropriate, enter energy and water metered data into Portfolio Manager, publicly disclose annual benchmark energy performance data through the U.S. Department of Energy's web-based tracking system, and incorporate the [Green Button](#) data access system/program into report, data analytics and automation, and processes.

As agencies seek to implement these new and continuing requirements, ASHRAE may be able to be of assistance through our technical expertise, standards, and guidance. To this end, preliminary discussions have begun to obtain more information.

If you have any questions, please contact ASHRAE's Government Affairs Office at [WashDC@ashrae.org](mailto:WashDC@ashrae.org).

### *Year Set to End Without Major Energy Efficiency Bill; Policymakers Begin Looking for Alternatives*

Many long hours have been spent since 2011, when the Energy Savings and Industrial Competitiveness Act ([S.1392](#)), also known as Shaheen-Portman, was first introduced, and with another year about to end without passage, some Members of Congress are becoming restive, looking for new avenues to advance energy efficiency legislation.

Despite the grumbling, at this stage, Shaheen-Portman is still the primary vehicle for energy efficiency in Congress. Yet, as supporters continue rallying behind the bill, the familiar obstacles of clearing time on the Senate's packed schedule, and reaching an agreement on the number and nature of amendments to the bill remain. Already 120 amendments have been introduced, and since one-third of the Senate is up for reelection in 2014, more amendments are expected, as Senators seek to use Shaheen-Portman as an opportunity to demonstrate their commitment to either advancing energy efficiency or taking stances on other issues important to them and their constituents – even if those issues are not immediately related to energy efficiency.

The future for Shaheen-Portman is both clear and vastly uncertain. Senators Shaheen and Portman will undoubtedly try again to pass the bill through the Senate, but a small group of Senators could keep passage from occurring – and an attempt of this nature is fairly likely. Thus, the real questions are whether the combined efforts of supportive Senators talking with their colleagues, and stakeholder groups mobilizing constituents, will be enough to convince key Senators from offering unrelated amendments that would hold-up or derail passage of the bill.

What will the New Year bring? Keep reading the *Government Affairs Update* and [email Mark Ames](#), ASHRAE's Senior Manager of Federal Government Affairs, to find out.

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## *Tax Incentives for Energy Efficiency to Expire At Years' End*

Earlier this week, U.S. Senate Finance Committee Chairman Max Baucus (D-MT) released his latest proposal to reform the national tax code. The plan does not include an extension to the Section 179D commercial buildings tax deduction, which is set to expire at the end of 2013, and specifically suggests repealing, or allowing to expire, the following tax provisions (among others):

- 25C – residential energy efficiency
- 45L – construction of energy efficient new homes
- 45M – energy efficient appliances

A large group of stakeholders, including the National Association of State Energy Officials, are actively working with Chairman Baucus and the Finance Committee to encourage the extension and improvement of these tax provisions.

The Senate is expected to consider comprehensive tax reform next year, yet its exact course remains unclear. Chairman Baucus has announced that he will not seek reelection next year, and is expected to be nominated by President Obama to serve as the U.S. ambassador to China. This will create a temporary leadership vacuum on the Finance Committee and may be further impacted by the results of the Congressional elections in late 2014.

To view the Chairman's proposal, visit <http://ow.ly/rXqoB>. For additional information, you are also welcome to [contact Mark Ames](#), ASHRAE's Senior Manager of Federal Government Affairs.

## **The 2013-2014 South Dakota Chapter ASHRAE Line-up:**

Sept 12	Noon	Tom Meyer – Building Water Systems – Water, Water Everywhere. Which Drop to Drink? <i>ASHRAE Distinguished Lecturer</i>
Oct 2	Evening	Eric Ollerman, Data Center Systems Jay Ries, Liebert <i>Data Center Thermal Management Student Night / Membership</i>
Nov 6	Evening	Tony Tedder, ColdStream Software <i>Revit Past Presidents Night</i>
Dec 11	Noon	David Day, Ebtron – Airflow Monitoring
<b>Jan 8</b>	<b>Noon</b>	<b>Joe Randolph – The Air We Breathe – The IAQ Impact of Filtration Camfil USA</b>
Feb 15	Valentines Event	Olde Towne Dinner Theatre – “The Savage Dilemma” by John Patrick.

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Mar 5	Evening	Eckhard A. Groll – Review of Compression Concepts for Heat Pumping, Air Conditioning, and Refrigeration Applications. <i>ASHRAE Distinguished Lecturer</i> Scott Martin, RVC – Research Promotion Night
April 2	Evening	Rod Hyatt – Solar Heating Systems Solar Skies Mfg., LLC. <i>Student Night/Events Center Tour</i>
May 3		<i>Fishing</i>
May 30		<i>Golf</i>

## From ASHRAE HQ

### ASHRAE Publishes Revised Standard on Ventilation in Health Care Facilities

ATLANTA—In some sense, designers of health care facilities must follow the same creed as health care professionals: to first do no harm. A newly revised standard for ventilation of health care facilities, can help designers by providing the minimum requirements for the design of ventilation systems for health care facilities to provide environmental control for comfort, as well as infection and odor control.

ANSI/ASHRAE/ASHE Standard 170-2013, *Ventilation of Health Care Facilities*, was written by ASHRAE and the American Society for Healthcare Engineering (ASHE). When the standard was first published in 2008, it was the first American National Standards Institute (ANSI) standard in the nation to specifically address ventilation in health care facilities.

“Without high-quality ventilation in health care facilities, patients, health care workers and visitors can become exposed to contaminants through normal respiration of particles in the air.” Paul Ninomura, chair of the 170 committee, said. “Ventilation systems and designs for health care facilities are intended to provide a comfortable environment for patients, health care workers and visitors while diluting, capturing and exhausting airborne contaminants including potentially infectious airborne agents.”

Standard 170 has been in constant maintenance since 2008 and the past five years have provided an opportunity to review and further improve it. The revised standard features updates, changes and clarifications dealing with humidity, ducted returns, recirculating rooms units and duct lining, to name just a few refinements.

One trend that almost all classes of buildings have seen on the rise lately has been energy efficiency. Health care facilities can be energy extensive buildings and energy recovery can provide significant savings. Provisions for the application of energy recovery are now specifically addressed in 170-2013. However, as the standard stipulates, if energy recovery systems are utilized, the systems cannot allow for any cross-contamination of exhaust air back to the supply airstream. Run around coils are just one example of a system that is permitted, according to Ninomura.

The standard also addresses some issues that may reduce costs to build and operate health care facilities. Standard 170 allows relative humidities as low of 20 percent for some rooms. This may result in smaller capacity of humidification equipment, lower operating costs and reduced maintenance costs. The

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standard permits some use of plenum returns in outpatient facilities, which in turn may result in lower construction cost and operating costs.

Additionally, some hospitals are interested in utilizing displacement ventilation to reduce operating costs. The standard addresses the application of displacement ventilation within patient rooms.

Poorly ventilated health care facilities may increase the concentration of airborne contaminants including fungi or mold, which may cause allergic responses in even healthy workers and occupants. Considering the various occupancies and patient populations, great care must be taken in the design of health care ventilation systems.

The cost of ANSI/ASHRAE/ASHE Approved Standard 170-2013, *Ventilation of Health Care Facilities*, is \$58 (\$48, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 678-539-2129, or visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

## **For Those Attending the New York ASHRAE Meeting:**

The regional dinner will be held at

Carmines  
200 West 44<sup>th</sup> Street  
New York NY  
212-221-3800

**The event will be Monday 1/20/2014 at 8:00 PM.** We will leave from the lobby of the Hilton at 7:30. If you are interest in attending send me an e-mail. I will add your name to the signup sheet and will post it in the registration area for anyone else from our region. Alcoholic beverages are on your own.

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**ASHRAE Valentines Special Event**

**February 15, 2014 – Saturday Night**

## Olde Towne Dinner Theatre

**The Savage Dilemma**

By John Patrick

The time is here again for the annual ASHRAE Valentine's Day Special event. After a very entertaining show and great company last year, we will again be returning to Worthing Olde Towne Dinner Theatre for dinner and a performance of "The Savage Dilemma" on Saturday, February 15, 2014.

Doors open and social hour begins at 6:00 PM, dinner at 6:30 PM and the show starts 8:00 PM.

The meal included with the performance is as follows.

### **Act One**

Soup: Potato and Bacon Soup

Olde Towne House Salad (Choice of Dressings)

### **Act Two**

Your choice of:

Top Sirloin with Rosemary Sauce

Italian Chicken Wellington

Baked Swordfish

### **Props**

Potatoes O'Brien

Glazed Carrots

Assorted Dinner Rolls

### **Curtain Call**

Dessert: Chocolate Mousse Cake

Complimentary Beverages: Coffee, Tea, Milk

Tickets will be \$40.00 each person and money needs to be either mailed or delivered to Trane by **February 1<sup>st</sup>**. Checks are to be made out to South Dakota Chapter of ASHRAE. Trane's address is: 3500 S. 1<sup>st</sup> Ave. Suite 150; Sioux Falls, SD 57105



For those who have not been at Old Town Dinner Theater, while traveling on Interstate I-29 take exit 64. The theater is located at:

**Old Towne Dinner Theatre**  
121 South Main Street,  
Worthing, SD 57077.

If you have any questions please give me a call at (605) 336-8500 or e-mail me at [jlhorstmeyer@trane.com](mailto:jlhorstmeyer@trane.com).

Thank you and I hope to see everyone there for another great show and great company!

Jeff Horstmeyer

### **Play Overview:**

Depressed and world-weary, after extensive travels, the reputedly wealthy Mrs. Ethel Savage returns to the sheltered precincts of The Cloisters, seeking refuge among her former fellow patients. But The Cloisters is on the verge of closing due to lack of funds, and as Mrs. Savage's fortune is now in the control of her greedy stepchildren, she is powerless to help. Filled with delightful plot twists and turns, the play leads to a heartwarming lesson in the essential goodness that lurks somewhere even in the worst (and sanest) of us.

