

# ASHRAE Rochester



VOLUME 11, ISSUE 5

DECEMBER, 2016

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## December ASHRAE Meeting

**Topic 1:** (10am) Fundamentals of Refrigeration: Principles and Common Components

**Topic 2:** (Noon) Impact of new EPA and DOE Regulations on Refrigeration and Cooling

**Presenters:** Sam Scorsone, PE and Mike Nohle

**When:** Monday December 12th, 2016

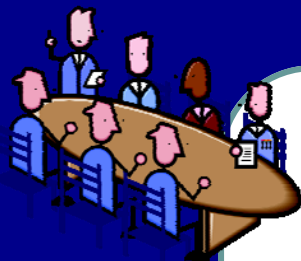


**Where:** City Grill  
384 East Ave, Rochester

**Cost:** \$25.00

Please RSVP by noon Thursday, December 8th to Tim Duprey  
[tim.duprey@pres-services.com](mailto:tim.duprey@pres-services.com)

Statements made in this publication are not expressions of the Society or of the chapter and may not be reproduced without special permission of the chapter.



## Chapter Officers

### President

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### President Elect

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tstreber@jswanson.com

## Committee Chairs

### CTTC

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jwiedrick@bergmannpc.com

### Grassroots Government Advocacy

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tom.burke@wegmans.com  
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George@hermanhvac.com

### Refrigeration Co-Chairs

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mnohle@meiersupply.com  
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### Student Activities

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## Board of Governors

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### Nominating / Past President

Christina Walter (585) 486-2148  
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### Buyer's Guide

Branden Farnsworth-Weinblatt, PE  
(585) 364-1628  
bfweinblatt@popligroup.com

ASHRAE 2016-2017 Meeting Schedule			
Date	Event	Theme	Location
Monday, 12/12/2016	Fundamentals of Refrigeration Principles and Common Components (presented by Sam Scorcone, PE, Bergmann Associates)	YEA Tech Session (PDH Approved)	City Grill @ 10:00 AM
	Impact of new EPA and DOE Regulations on Refrigeration and Cooling (presented by Mike Nohle, MEIER Supply, Refrigeration Division Manager)	Resource Promotion (PDH Approved)	City Grill @ 12:00 PM
Monday, 1/9/2017	Cleanroom Design Considerations from a Certifiers Perspective (presented by Ralph Craft, R. Kraft, Inc)	(PDH Pending)	City Grill @ 12:00 PM
Friday, 2/10/2017	ASHRAE Valentines Dinner Dance	---	TBD
Monday, 2/13/2017	Data center and Critical space cooling technology advancements (presented by Mike DeGaetano, RL Kistler Inc)	Membership Promotion (PDH Pending)	City Grill @ 12:00 PM
Monday, 3/13/2017	ASHRAE Building Energy Quotient (bEQ) (presented by Hoy Bohanon, PE, President, Hoy Bohanon Engineering, PLLC)	Resource Promotion (PDH Pending)	City Grill @ 12:00 PM
Monday, 4/10/2017	Refrigeration Tour	Refrigeration Night (PDH Pending)	TBD
Monday, 5/8/2017	Annual ASHRAE Golf Outing and Picnic (Ravenwood Golf Course)	---	9:30 AM Golf 4:30 - 8:00 Picnic

Note: Dates, topics and presenters are subject to change, but if this happens we will post any updates to the calendar on our website.

Updated 11/9/16

## Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.



Shaping Tomorrow's  
Built Environment Today

## Vision Statement

- will be the global leader in the arts and sciences of heating, ventilation, air conditioning and refrigeration.
- will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

# President's December Message

December Newsletter 2016  
President's Message

Our meeting in November was on "Air Filtration" presented by Jeff Thidbodeau and Steve Mongeau from American Air Filter International. Thank you to everyone that attended.

ASHRAE Rochester has started a new group, Women in ASHRAE within our chapter this year. This group is being led by Jaimee Wilson, PhD, PE, LEED AP. Their goal is to provide guidance, networking, and professional development for female engineers. If you are or have a female co-worker in HVAC engineering I would highly recommend getting them in touch with Jamiee. Quick fact: ASHRAE Society as a whole is made up of 6% female members. In Rochester our membership is made up of 9% female members currently and I truly expect this number to grow due to the leadership of Jamiee with the Women in ASHRAE group.

In December the Young Engineers of ASHRAE (YEA) will be hosting a technical session prior to our regularly scheduled chapter meeting. The topic will be Fundamentals of Refrigeration presented by Sam Scorson, PE. The chapter meeting topic will be "Impact of new EPA and DOE Regulations on Refrigeration and Cooling" presented by Mike Nohle. We hope to see you at our December Meeting.

Please continue to check out our website at [www.rochester.ashraechapters.org](http://www.rochester.ashraechapters.org) for information on upcoming chapter meetings, current officer list and contact information, chapter newsletters, and more! Also take a minute and like us on Facebook at [www.facebook.com/#!/ashraerochester](https://www.facebook.com/#!/ashraerochester).

Jeffrey Close, P.E.  
2016-2017 President  
Rochester Chapter



*Jeff Close, 2016-2017 President*

# December Meeting Info

Please consider joining us for this upcoming monthly meeting and/or please forward this e-mail to anyone you may think would be interested in attending or benefit from this presentation.

## December ASHRAE Meeting << 2 PDH's APPROVED>>

**Date:** Monday, December 12, 2016

**Location:** City Grill **\*\*OUR NEW LOCATION\*\***

**Time:** 10:00 AM Lunch Buffet at Noon

**Cost:** \$25.00

**Speakers:** Sam Scorsone, PE and Mike Nohle

**Topic #1:** Fundamentals of Refrigeration: Principles and Common Components  
Starts at 10am

**Topic #2:** Impact of new EPA and DOE Regulations on Refrigeration and Cooling  
Starting at 12:30pm

**Note:** (1) PDH for each topic {Approved}

### Refrigeration Meeting

Our refrigeration committee has many topics to share with us this year and to fit it all in they will be delivering (2) presentations, both PDH approved. Our meeting will start off with a tech session at 10 am

**Fundamentals of Refrigeration:** Principles and Common Components ... Sam Scorsone, PE a mechanical engineer with Bergmann Associates and a member of the Rochester Chapter of ASHRAE Refrigeration Committee, will be presenting.

**Impact of New EPA and DOE Regulations on Refrigeration and Cooling:** ... Mike Nohle, the Refrigeration Division Manager at Meier Supply and the Rochester Chapter of ASHRAE Refrigeration Committee Chairman, will be presenting.

Please come and join us for one or both presentations and lunch, and learn about refrigeration fundamentals and how new regulations will impact the industry.

Remember, as an option, we have on-line payments available via PayPal. (no PayPal account required)

<< Pay for Meeting Registration online via PayPal >>

Use the following link: <http://rochester.ashraechapters.org/meetings.html>

Cash or check payment is still accepted at the door with your reservation.

Please RSVP no later than noon Thursday December 8th to Tim Duprey

Phone: 585.330.6430 or e-Mail ... ASHRAERochester@gmail.com, tim.duprey@pres-services.com or tduprey@rochester.rr.com.

# Highlights from November ASHRAE Meeting



November's ASHRAE Meeting was on "Air Filtration", which was presented by Jeff Thidbodeau (Southern New England / Upstate NY District Manager) and Steve Mongeau (Manager, HVAC OEM) from American Air Filter International.






This section of the newsletter is reserved for those firms wishing to advertise their desires to hire from the Chapters Membership.

If you are interested in utilizing this FREE service provided by the Rochester Chapter, please contact our Chapter President, Jeff Close at (585) 289-6816 or by email [jeff.close@pres-services.com](mailto:jeff.close@pres-services.com).

This service is available to ASHRAE members for any local firm in our industry looking for knowledgeable persons in the HVAC&R industry.

Job ID / Location	2016-25804: US-NY-Rochester (1 position) 2016-25927: US-NY-Endicott (1 position)	
Minimum Experience (Years)	7	
Discipline	Buildings Engineering	

**Your Opportunity:**

Our Buildings Engineering group specializes in the design and development processes unique to buildings. Working closely with our clients, our dedicated professionals help to establish and understand the needs of a range of building projects. This is where great ideas and rewarding careers are built. For both public and private sector clients, we provide unique plan checking capabilities as well as energy engineering and performance engineering services, covering each of the major engineering disciplines-structural, mechanical, and electrical. In addition, we bring together innovative and functional design solutions for companies involved in the discovery, research and development, and commercial scale manufacturing of pharmaceuticals, biotechnology, and medical device products. Focused on providing cost-effective solutions to engineering challenges, we are involved in a diverse range of projects from the initial planning stages to design, construction, and commissioning. Our structure cultivates career growth and provides opportunities as unique as you are.

**Your Duties:**

- Duties will include but are not limited to preparation of project proposals and resulting contracts, project implementation plans, resource planning, quality control and design review, project team review and coordination, client, and financial management.
- May assist as mechanical engineering lead overseeing the engineering & design of plumbing / fire protection / HVAC and other mechanical systems for new and renovated buildings.
- Mechanical engineering - actual designs including the completion of code reviews, preparation of the basis of design, system calculations, mark-up of drawings, specification preparation, field investigations, construction estimating and site inspections and other such design as required to execute the mechanical construction for new or renovated buildings.
- May perform project manager duties as needed.
- Some travel to site locations or other Stantec offices may be required.

**Your Capabilities and Credentials:**

The successful candidate will possess:

- Requires a B.Sc. Mechanical Engineer
- NYS PE desired, registration in other states a plus
- 7+ years' experience required
- Must have strong Mechanical Engineering skills in Plumbing, Fire Protection, HVAC, and related mechanical systems
- Prior management experience is a plus
- Prior consulting engineering experience is required
- Experience using Autocad, Revit, Trane Trace or Equest is a plus
- Excellent verbal and written communication skills
- Excellent interpersonal skills with team members and clients

We put people first, and it shows. We're proud to be one of New York's Best Places to Work, as named by The Business Council of New York and NYS-SHRM.

Please apply online directly at:

- (Rochester) <https://jobs-stantec.icims.com/jobs/25804/senior-mechanical-engineer---buildings/job>
- (Endicott) <https://jobs-stantec.icims.com/jobs/25927/senior-mechanical-engineer---buildings/job>

Presidential Award Of Excellence



Download



Achievements



Report

Chapter: ROCHESTER

Fiscal Year: 2016-2017

▶ Chapter Operations	Par: 1200	Min Points: 600	Total Points: 1315
▶ Chapter Technology Transfer	Par: 1050	Min Points: 450	Total Points: 250
▶ Grassroots Government Advocacy	Par: 650	Min Points: 500	Total Points: 250
▶ Historical Criteria	Par: 300	Min Points: 100	Total Points: 285
▶ Membership Promotion	Par: 800	Min Points: 500	Total Points: 600
▶ RP	Par: 1050	Min Points: 800	Total Points: 790
▶ Student Activities	Par: 500	Min Points: 300	Total Points: 900

**Like us on Facebook!**

Visit our new Facebook page by searching for "ASHARE Rochester" on Facebook. Any ideas for additions or improvements email to Mark Kukla at mark@airsystemsbalancing.com. Keep up to date with current events and photos from recent meetings.



# Rochester Chapter

## Committee Chairs Updates

### Research Promotion



#### *Research Promotion Report*

*Thank you for the support in 2015/2016!!*

We thank everyone who contributed to last years campaign to support ASHRAE research, these donations are truly an investment in our Region and the future of our industry. We invite everyone to join us in honoring all of our Donors at the upcoming Donor Recognition meeting on December 12<sup>th</sup>.

#### **Golden Circle (\$10,000 - \$19,999)**

Gray Metal Products

#### **Major Donor – Silver (\$1,000 - \$9,999)**

R.P. Fedder Corporation - Rochester  
ASHRAE Rochester Chapter

#### **Major Donor – Bronze (\$500 - \$999)**

Mrs Lynn G Bellenger Memorial, PE

#### **Major Donor – Antique (\$250 - \$499)**

R.L. Kistler, Inc.  
Genesee Heating  
Massive Testing & Balancing, LLC  
Day Automation Systems Inc  
SMACNA Rochester  
Mr. Richard Morelle  
Mr. Richard P. Barrett

#### **Honor Roll (\$100-\$250)**

R.F. Peck Co. - Rochester  
Mr. Branden A Farnsworth-Weinblatt  
Mr. Mark Snyder  
Mrs. Christina M Walter  
Mr. Charles G White  
Mr. Jeffrey C Ellis  
Mr. Jeffrey C Bidell, PE, CBCP  
Mr. Peter C Oppelt  
Mr. Matthew R Devlin  
Mr. James C Browe  
Mr. Jeffrey S Close, PE  
Mr. William J Clark, PE  
Mr. Ronald C Mead  
Mr. Paul P Kenna

#### **ASHRAE Supporters**

Mrs Elizabeth L Ormond  
Mr Patrick G Whelan  
Mr Carl Louis Gambacurta  
Mr Stephen E Maybeck  
Mr Benjamin Curwin  
Mr David D Principe  
Mr Kevin J Gottermeier

Thanks again for all your support and I look forward to seeing you at the next Rochester Chapter Meeting.

Matt Devlin, CEM, CPMP

RP Chair

[www.ashrae.org/contribute](http://www.ashrae.org/contribute)

# Membership Promotion

## ASHRAE Rochester Chapter- Membership Promotion

Please remember to take a few minutes to make sure that your profile is up to date at [www.ASHRAE.org](http://www.ASHRAE.org). Maybe you've changed jobs? email address? or would like to advance your membership (i.e. Associate Member to Member). Keeping this information current ensures that you get the most value out of ASHRAE.

We have a new member since last month, if you see Tim Frieday, please welcome him!

Thank you, and as always, thank you for your support for ASHRAE.

Sincerely,



The graphic is a rectangular box with a green border. On the left side, there is the ASHRAE logo (a blue hexagon with 'ASHRAE' in blue) and the text 'Rochester Chapter' in green. To the right of the logo, the text 'Membership Promotion' is written in bold black. Below this, it says 'Join Online' followed by the URL [ashrae.org/membership](http://ashrae.org/membership). Further down, it says 'ASHRAE Rochester Chapter' followed by the URL [Rochester.ashraechapters.org](http://Rochester.ashraechapters.org). At the bottom left of the box, it lists 'Michael Benedict', '(585) 490-2661', and [mike@airsystemsbalancing.com](mailto:mike@airsystemsbalancing.com).

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## YEA

### YEA Leadership Weekend

We have one position left for the YEA Leadership weekend March 3-5 in Denver. This is an excellent opportunity to interact with other young engineers from throughout the country, and to develop skills to further your career. All registration and travel expenses will be paid! Contact Matt Kremers at [mkremers@mcsmms.com](mailto:mkremers@mcsmms.com).

### YEA Fundamentals- Refrigeration

Before the December meeting we will have a fundamentals of refrigeration course. Sam Scorsone will be presenting. To register contact Matt Kremers at [mkremers@mcsmms.com](mailto:mkremers@mcsmms.com).

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

November 11, 2016 @ 7:30 AM

Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

President / CRC Delegate	Jeff Close	X
President Elect / Program/ CRC Alternate	Bill Clark	X
Treasurer	Paul Kenna	X
Secretary	Tom Streber	X
Immediate Past President & Nominating	Chris Walter	
Board of Gov. (3) & Attendance Chair	Tim Duprey	X
Board of Gov. (3) / Buyers Guide	Branden Farnsworth-Weinblatt	X
Board of Gov. (2) & Refrigeration Co-Chair	Sam Scorsone	
Board of Gov. (2) & Website Chair	Steve Dear	
Board of Gov. (1) & Membership Promotion (MP)	Mike Benedict	
Board of Gov. (1)	George Herman	
Historian Chair	Jake Hall	
Newsletter Editor	Scott Edwards	
Resource Promotion Chair (RP)	Matt Devlin	X
Awards & Recognition Chair	Al Rodgers	
Chapter Technology Transfer Chair (CTTC)	Jeff Wiedrick	
Education	Bill Murray	
Publicity	Mark Kukla	
YEA Chair (Young Engineers in ASHRAE)	Matt Kremers	X

# Board of Governors Meeting Minutes



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Student Activities Chair (SA)	Rob Hudson	X
Picnic/Golf Chair & CRC 2016 Committee Chair	Jim Browe	
Valentine's Dinner Dance	Jody McGarry	X
Grassroots Government Advocacy Chair	Tom Burke	
Refrigeration Co-Chair	Mike Nohle	
Women in ASHRAE	Jaimee Wilson	

## AGENDA

1. Call to Order Jeff Close
2. Roll Call Tom Streber
3. Review and Approval of Previous Meeting Minutes All
  - Minutes approved.
4. Treasurer Paul Kenna
  - Current Statement Balances.
  - 2016-2017 P&L Update.
  - Financial audit today with Barb Hurl, Steve Maybeck, Jeff Bidell and Paul Kenna.
5. President Elect/Program Bill Clark
  - Flanders Filtration to present on 11/14.
  - Schedule Update.
  - December's meeting:
    - Main program and tech session (10 am).
    - Both presentations are PDH approved.
    - Offer to RSES to join December's meeting.

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

November 11, 2016 @ 7:30 AM

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(Call in #1-712-432-0360, Access: 137504#)

- |   |               |
|---|---------------|
| 6. Attendance   | Tim Duprey    |
| <ul style="list-style-type: none"> <li>• Previous meeting summary           <ul style="list-style-type: none"> <li>○ 102 paid.</li> <li>○ (22) 1<sup>st</sup> time, non-member attendees. (7) 2<sup>nd</sup> time.</li> </ul> </li> <li>• (42) Current reservations.</li> </ul>   |               |
| 7. CTTC Report  | Jeff Wiedrick |
| <ul style="list-style-type: none"> <li>• Project submission by April 1, 2017.</li> <li>• Procedure for submission provided to Jeff Close.</li> <li>• Put together list of submission categories.</li> </ul>   |               |
| 8. Membership Report  | Mike Benedict |
| <ul style="list-style-type: none"> <li>• Current members - 245 (255 in 2015).</li> <li>• Membership upgrades.</li> <li>• Recruitment.</li> </ul>  |               |
| 9. Student Activities Report  | Rob Hudson    |
| <ul style="list-style-type: none"> <li>• Student chapter status (MCC or RIT). No apparent interest.           <ul style="list-style-type: none"> <li>○ Going to reach out to Pat C. @ Kenron for better MCC access.</li> </ul> </li> <li>• Looking to book presentations at local school districts.</li> <li>• Grant for senior project.</li> </ul> |               |
| 10. Education Report  | Bill Murray   |
| <ul style="list-style-type: none"> <li>• Jeff Close reached out to other chapters for scholarship distribution.</li> <li>• Look into opportunities at BOCES and vocational schools.</li> </ul>  |               |
| 11. YEA Report  | Matt Kremers  |
| <ul style="list-style-type: none"> <li>• Leadership weekend.           <ul style="list-style-type: none"> <li>○ Open registration.</li> <li>○ Need clarification on payment/reimbursement for attendee expenses.</li> </ul> </li> <li>• UL Lab tour to be scheduled.</li> </ul>   |               |

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

Board of Governors Meeting

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(Call in #1-712-432-0360, Access: 137504#)

12. Awards & Recognition Report Al Rodgers
- Chris Walter working on getting Lynn Bellinger inducted.
13. Resource Promotion Report Matt Devlin
- Current vs. Goal - at 60%.
  - Full Circle Contributions have been completed.
  - Donor recognition to occur at December meeting (12/12).
14. Refrigeration Report Mike Nohle/Sam Scorsone
- Tech session planning.
  - Need presentation for December's meeting ASAP.
  - Tour options.
15. Grassroots Government Advocacy Report Tom Burke/George Herman
- Achieved 3 of 5 MBO's so far.
16. Newsletter Report Scott Edwards
- Committee submissions
    - Only (2) in November. Better response needed.
  - Newsletter deadline.
  - RES deadline has passed. Submission has been completed.
17. Buyers Guide Branden Farnsworth-Weinblatt
- Transition from Marianne. Contact sheet is needed from Marianne.
  - Plan/schedule for this year.
  - Potential for business card ads attached to monthly newsletter.
  - Need better exposure for subscribers.
18. Historian Report Jake Hall
- Digitizing archive status. Looking into expediting the process.
  - CRC history display at chapter meeting on 11/14.
  - Invite life members to meetings.
19. Publicity Report Mark Kukla
- Like ASHRAE on Facebook.

# Board of Governors Meeting Minutes



Rochester Chapter - ASHRAE

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Day Automation, 7931 Rae Blvd, Victor, NY 14564  
(Call in #1-712-432-0360, Access: 137504#)

20. Website Report Steve Dear/Kevin Wind
- Monthly updates (schedule, newsletter, BOG MM's).
  - Need to correct "Realto E. Cherne" award on website.
21. Nominating Report Chris Walter
- List of candidates by Nov meeting.
  - Tax filing has been completed.
  - Pathfinder has been contacted regarding Lynn Belenger's nomination.
22. Women in ASHRAE Jaimee Wilson
- New student member.
  - Happy Hour this Thursday.
23. Valentines Dinner Dance Report Jody McGarry
- Scheduled for 2/10, Friday.
  - Century Club, Artisan Works or Woodcliff.
    - Looking at cost, parking, menu and hotel room rates (for overnight).
  - Pricing to stay the same as 2015.
  - Sponsorship requests to go out before end of November.
24. Golf/Picnic Report Jim Browe
25. Presidential Award of Excellence (PAOE)
26. New Business:
- CRC expenses closed.
27. Old Business:
- 2015-16 Audit and Audit Committee.
  - Lynn Bellenger Hall of Fame Award Nomination.
  - Student Branch (i.e. MCC, RIT, FLCC or UofR).
28. Set next BOG Meeting date / time / place.
- Friday, December 9th @ 7:30 AM, Day Automation Office.
29. Adjourn: 8:40 am



# ASHRAE Student Membership Application

## What You'll Get With Your ASHRAE Student Membership!

### What's "Cool" In ASHRAE

- ASHRAE promotes energy efficiency, savings and recovery
- ASHRAE reports on building controls, automation and integration
- ASHRAE focuses on green building issues and green technology
- ASHRAE maintains standards for indoor air quality
- ASHRAE promotes solar and other alternative energy sources
- ASHRAE offers certification programs, online learning opportunities and courses and seminars at ASHRAE Conferences

### How Can ASHRAE Help You?

- Provide access to new technology
- Offer professional development opportunities
- Create opportunities for networking
- Offer online continuing education programs and eLearning programs

### Student Member Benefits

- Access to members-only web pages
- Discounts on ASHRAE Handbooks
- Monthly ASHRAE Journal - print and digital
- HVAC&R Industry and Society Connections eNewsletters
- Complimentary ASHRAE Annual and Winter Conference registration (AHR Expo, Student Program, Technical Sessions)
- Virtual online HVAC&R resume posting, job and internship searching program

### ASHRAE Student Member Opportunities

- Society and chapter-level scholarships for both undergraduate and graduate engineering students
- Discounts for student members on select publications, go to [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) for more information
- Student Design Competition
- Networking with local ASHRAE Chapters
- Senior Undergraduate Project Grant Program
- At the student branch level, you'll enjoy meeting other students with similar interests - if your school hasn't yet started a student branch, take charge and contact a faculty member and ask for help on getting started!

You can continue your student membership after college with the ASHRAE SmartStart Program. After you graduate, you pay \$20 for the first year, \$50 for the second and the third years before advancing to regular member dues!

**Join ASHRAE students on Facebook  
Visit [www.ashrae.org/students](http://www.ashrae.org/students) to join!**





**ASHRAE**  
STUDENT MEMBERSHIP APPLICATION

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.  
ASHRAE • 1791 TULLIE CIRCLE NE • ATLANTA, GA 30329-2305 • FAX: 678-539-2212

FIRST NAME:

LAST NAME:

DATE OF BIRTH (mm/dd/yyyy)

Current Mailing Address: (this will be where all correspondence will be sent unless otherwise specified)

Street Address: \_\_\_\_\_ Apt. # \_\_\_\_\_ City: \_\_\_\_\_  
State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_  
Email: \_\_\_\_\_ Alternate email: \_\_\_\_\_ Phone: \_\_\_\_\_

Permanent Mailing Address: (during the Summer Months and after graduation)

Check if Current Address is the same as Permanent Address

Street Address: \_\_\_\_\_ Apt. # \_\_\_\_\_ City: \_\_\_\_\_  
State/Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_  
Email: \_\_\_\_\_ Alternate email: \_\_\_\_\_ Phone: \_\_\_\_\_

ASHRAE protects contact information provided by its members and customers. To view ASHRAE's privacy policy visit [www.ashrae.org/privacy-policy](http://www.ashrae.org/privacy-policy).

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- L. Project/Application Engineer
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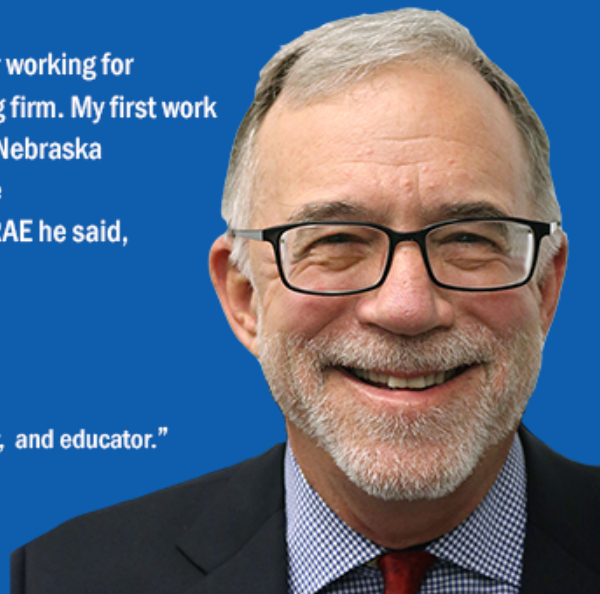
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"I started in this industry 40 years ago by working for our family-owned mechanical contracting firm. My first work assignment from my Dad was to join the Nebraska Chapter of ASHRAE. When I asked why he wanted me to drive 60 miles to join ASHRAE he said,

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~Timothy Wentz, P.E., HPBD  
ASHRAE President 2016-2017



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# News

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For Release:  
Nov. 15, 2016  
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## Changes to Commissioning Requires Proposed for Green Building Standard

ATLANTA – Changes to the commissioning requirements in Standard 189.1 that would increase its ability to support achieving high performance green buildings are open for public input. Published by ASHRAE, the Illuminating Engineering Society (IES), the U.S. Green Building Council (USGBC) and the International Code Council (ICC), ASHRAE/IES/USGBC/ICC Standard 189.1, *Standard for the Design of High Performance Green Buildings*, contains minimum requirements for the siting, design and construction of high performance green buildings in support of reducing building energy use, resource consumption and other environmental impacts, and maintaining acceptable indoor environments.

Eleven addenda to Standard 189.1 currently are out for public review. For more information or to submit a comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews)

Proposed addendum *aq* updates the standard's requirements for building systems commissioning. Committee chair Andrew Persily said the requirements are being changed for several reasons.

"We want to update the standard to reflect experience gained in applying the existing requirements as well to keep current with trends and terminology in the evolving commissioning industry," he said.

In addition to addendum *aq*, addenda *ap* and *as* are open for review until Dec. 19.

Addendum *ap* updates the normative references in Section 11 and the informative references in Appendix G, primarily to reflect the latest publication dates in referenced standards.

Addendum *as* updates the acoustical requirements based on new technical requirements as well as review of the International Green Construction Code, Acoustical Society of America documents, Facilities Guideline Institute healthcare guide and the U.S. Green Building Council's LEED. The changes include a requirement that room background noise levels be controlled by calculation instead of by prescribing several interrelated features, allowance of either a prescriptive or testing approach for building envelope and interior assemblies, requirements for mechanical equipment and noise to adjacent properties by equipment and addition of a new section on acoustical testing.

***See next page for continuation***

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## Changes to Commissioning Requires Proposed for Green Building Standard

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In addition, seven addenda are open for public comment until Dec. 4, 2016. They are:

- Addendum *ae* addresses plans for the treatment of waste materials originating from the development of a building project site.
- Addendum *ag* creates a new definition for plants that are suitable for inclusion in this standard.
- Addendum *ah* revises the lighting power density (LPD) requirements for exterior parking areas.
- Addendum *ai* adds requirements for testing, installation and commissioning of air curtains when they are installed in building entrances.
- Addendum *aj* revises the bi-level motion control requirements to better align with addendum *as* to ASHRAE/IES 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*.
- Addendum *al* modifies the provisions for electric vehicle charging infrastructure.
- Addendum *ak* updates the standard's life cycle assessment of buildings.
- Addendum *am* modifies the roof heat island mitigation section that was changed via addendum *i*.

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## Revised Residential Energy Standard Open for Industry Input

ATLANTA – Recognizing the amount of energy used by the residential building sector, ASHRAE and IES are revising their residential energy standard with a goal of making it 50 percent more efficient than the 2006 International Energy Conservation Code, which serves as the industry benchmark.

The residential sector consumes a fifth of all the primary energy used by the United States (21 percent) and more than half (54 percent) of all energy used by buildings. Similar trends are also observed in other parts of the world. For example, in Europe, residential buildings accounted for 75 percent of the total building stock and were responsible for 26.2 percent of the total European Union final energy consumption in 2012.

ASHRAE/IES Standard 90.2-2007R, *Energy Efficient Design of Low-Rise Residential Buildings*, is open for public comment from Nov. 4 until Dec. 19, 2016. For more information or to submit comments, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews). Theresa Weston, chair of the Standard 90.2 committee, said the revision of the standard, last published in 2007, represents a new approach in residential building energy performance.

“This new 90.2 seeks to deliver residential building energy performance that is at least 50 percent more efficient than the energy efficiency defined by the 2006 International Energy Conservation Code,” she said. “Key to accomplishing this objective is delivery of an accurate, flexible performance-based tool to enable user creativity in meeting the performance objectives. The new standard contains detailed rules governing the energy modeling and analyses needed to determine compliance with the performance objectives.”

The standard provides a mechanism by which any residential building design can be easily evaluated against these performance objectives. By establishing a clearly-defined rules set for energy performance modeling, users can easily assess various designs, material options, orientations and other variables to evaluate predicted energy performance, according to Weston. This analytical flexibility also provides users with a tool for helping to establish program targets and ensure program compliance.

The ruleset is based on ANSI/ICC/ RESNET 301 with specific exceptions and adjustments for building size. ANSI/ICC/ RESNET 301 is available online at <http://www.resnet.us/blog/ansiresneticc-standard-301-2014-january-15-2016/>

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## Revised Residential Energy Standard Open for Industry Input

### *See previous page*

Another key difference in the structure of this standard is that it allows users to develop multiple prescriptions – recipes of construction, systems and equipment – that will deliver the targeted performance. As such, users such as states, utility programs and product manufacturers may seek to build prescriptive “solutions” to assist builders with locally focused, performance-based compliant options.

Weston noted that an array of new building envelope, HVAC, lighting and equipment technologies exist to enable achieving even greater levels of residential energy efficiency. Since this standard is performance-based and focuses on whole building energy performance, all of these new technologies can be evaluated to meet the performance target.

Additional key features in this draft standard include:

- Title, Purpose and Scope – The standard now covers manufactured housing, which was not included in the 2007 version. It also addresses renewable and non-renewable forms of energy.
- Building envelope - The standard recognizes that long-lived building envelope decisions play a critical role in achieving the targeted building performance. Certified performance of insulation, fenestration and envelope air sealing are prioritized. Testing and verifying the envelope air leakage is mandatory. The standard attempts to address several problems in existing residential performance techniques. One major difference is adjustments in building modeling techniques to address the energy use implications of building size.
- Mechanical systems – The standard recognizes the importance of HVAC and water heating system performance as essential to achieving the overall building performance targets. Proper sizing and verification of duct system performance, as well as having all ductwork within conditioned space are fundamental to these objectives. Similarly, plumbing system design, insulation levels and controls are prioritized and are fundamentally new. Requirements for HVAC system design, installation, commissioning and verification are integral to 90.2.
- Lighting systems – The standard builds on the many recent cost-effective and long-lived advances in lighting technology – from lamps to control systems – to help deliver even greater levels of lighting energy savings than current minimum code. Key improvements include revised modeling rules for quantifying residential lighting energy, credits for the use of vacancy sensors, dimmers and other control devices and revised lighting allowances for interior, exterior, garage and other residential lighting.
- Onsite power systems – The standard recognizes the important role of renewable energy and onsite power systems to help achieve the building performance targets. It emphasizes load minimization and HVAC performance strategies first so that any onsite power systems used can have maximum impact toward the overall building performance goals.

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## Free Residentially-Focused Sessions Offered by ASHRAE at AHR Expo

ATLANTA – An in-depth look at ASHRAE’s work in the residential market as well as guidance on several aspects of residential design is offered in four free seminars at the 2017 AHR Expo.

The 2017 ASHRAE Winter Conference takes place Jan. 28-Feb. 1 at Caesars Palace with the co-sponsored AHR Expo being held Jan. 30-Feb. 1 at the Las Vegas Convention Center. To register for the Conference, which includes free access to the Expo, visit [www.ashrae.org/lasvegas](http://www.ashrae.org/lasvegas).

The four seminars are free, and no badge is required to attend. They take place Tuesday, Jan. 31, from 11 a.m. until 5 p.m.

Leon Shapiro, Conference chair, said the sessions are being held at the Expo given the large number of exhibitors with a residential focus as well as the many residential contractors who will be attendees. Statistics from the 2016 Expo show that 43 percent of visitors indicated they work in the residential sector.

“The sessions highlight the growing importance within ASHRAE of residential energy use and the steps ASHRAE has taken to partner with both the public and private sectors to improve residential design and energy standards,” he said.

“They also serve to increase public awareness in residential energy efficiency.”

He notes that design and installation have a tremendous impact on residential HVAC capacity and efficiency, so one of the seminar highlights the consequences when residential design and installation standards are not adhered to. Another session provides best practices for distributing heat in residential HVAC air and hydronic systems, while another offers real world experience on how actual energy use and thermal comfort can differ from the homeowner’s expectations.

The seminars are:

**Did It Really Work? Theory vs. Practice in Residential HVAC.** The late, great Yogi Berra once said: “In theory, there’s no difference between theory and practice. But in practice... there is.” The speakers at this seminar agree with Yogi. Using measured data from both dry and humid climates, they show how actual energy and thermal comfort in real-world houses differs from expectations. But beyond the problems, the speakers also show data from specific designs and installation practices that have helped contractors meet and exceed customer expectations with simple, low-cost, reliable equipment instead of whiz-bang, expensive stuff that too often fails to deliver comfort and low energy performance.

***See next page for continuation***

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**ASHRAE's Residential Initiative: Why We Care.** Although ASHRAE historically has not focused on residential HVAC energy use, the residential sector consumes at least as much energy as the commercial sector, and approximately one-fifth of all primary energy in the United States. Three Presidential Fellows will present on ASHRAE's recent endeavors into the residential sector. The session covers how the Residential Ad Hoc Committee became the newly established Residential Building Committee (RBC), what purpose the RBC serves, the importance of residential design in ASHRAE standards and a summary of ASHRAE's residential market advocacy efforts with government agencies.

**International Experience and Contractors Perspectives on Residential Aspects that Need to be Considered on Every Job.** It has long been recognized that design and installation faults have an impact on HVAC system capacity and efficiency. However, the magnitude and consequences of these fault impacts was unknown. This seminar provides insights from a recently concluded four-year investigation that quantifies the consequences of failing to observe the design and installation elements contained within the industry's HVAC Quality Installation Specifications. It also highlights steps taken in Europe that are relevant to the North American market to reduce residential energy consumption, including deep retrofit strategies and incremental options with large market uptake for overall large impact.

**Flex Ducts, Hard Ducts and No Ducts: Migration Patterns for Duct Hunters (or not) in the Land of Thermal Comfort.** In the land of comfort, educated homeowners are changing their thermal expectations from HVAC systems, and contractors are on the front line hunting for the best solutions. Regardless of ducts or pipes, the "migration" of heat takes a basic understanding of what works and what doesn't. It is not easy to figure out the right design for the application, especially as homes get more efficient. Low-cost ducted systems may not always work right or be the best fit. This seminar looks at best practices for distributing heat in residential air and hydronic systems, including ducted and radiant design options.

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