



November 2015

# THE LONG ISLAND SOUNDER



ASHRAE Long Island Chapter, Region 1...Founded in 1957

www.ashraeli.org

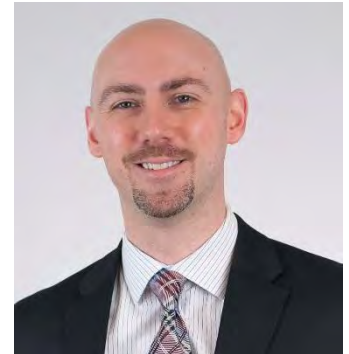
**American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.**

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## President's Message

As the days begin to get shorter, we now look towards the heating season. While much of our work, both within ASHRAE and without, seems to focus on air conditioning, we should remember that heating, and heating efficiencies are important matters. As ASHRAE members, you have access to various education sources, including the ASHRAE Self-Directed Learning center on the ASHRAE website. A viable topic for these colder months may be the [Fundamentals of Heating Systems](#). Please see ASHRAE.org and click on Education and Certification for more information.



We thank all those who attended last month's meeting, it was a great turn out. We were fortunate enough to have Evans Lizardos once again give us his "Back to Basics" Series with a presentation on *Selecting and Designing Refrigeration Equipment Component Packages*. His handouts make for excellent reference material. Thank you again to Dr. Max Sherman, who presented his entertaining *Dr. Duct Tape* presentation. We often joke how duct tape doesn't seal ducts, now we know why and what does.

SMACNA LI will be joining us for this November meeting. Our speaker will be Eli Howard and he will be speaking to us on "Phenolic Duct Construction Standards (PDCS)." Eli will focus on the various safety standards affecting phenolic duct, its applications, pressure classes and temperature limits. Eli is a great presenter and we are happy to welcome him back to ASHRAE Long Island. You will receive one PDH for attending the session. Please note we are back to our usual second Tuesday of the month schedule.

Along with our joint SMACNA meeting, this month is a combination YEA/Resource Promotion/Membership Promotion and Student night (we are pulling out all the stops). We will be thanking our generous RP donors for their past gifts. It is also a student/membership promotion night which means we will be welcoming new members and encouraging upgrades of membership.

As this is the month we give thanks, I want to thank the board and our volunteers for their time and commitment to ASHRAE. I look forward to seeing everyone at the November meeting and thank you for your continued support of the Long Island Chapter of ASHRAE.

**Thomas J. Fields, P.E., LEED AP**  
**President - Long Island Chapter**

## CHAPTER MONTHLY MEETING

<b>DATE:</b>	<b>Tuesday, November 10, 2015</b>
<b>TIME:</b>	6:00 PM - Cocktails/Dinner 7:00 PM - Dinner Presentation 8:45 PM - Conclusion
<b>LOCATION:</b>	Westbury Manor 1100 Jericho Tpke. Westbury, NY 11590
<b>FEES:</b>	
Members -	\$45.00
Guest -	\$50.00
Student -	\$15.00

*Reservations requested, but not required.*

*Call (516) 333-7117*

## Long Island Chapter Officers & Committees

### ASHRAE 2015/2016 OFFICERS

POSITION	NAME	PHONE	FAX	EMAIL
President	Thomas Fields, P.E., LEED AP	212.643.9055	212.643.0503	president@ashraeli.org
President-Elect	Charles Lesniak, P.E			president_elect@ashraeli.org
Vice President	Don Kane, P.E.	631.737.9170	631.737.9171	vice_president@ashraeli.org
Financial Secretary	Andrew B. Dubel, P.E.	212.967.7651	212.967.7654	finsec@ashraeli.org
Treasurer	Richard Halley	718.269.3809	718.269.3725	treasurer@ashraeli.org
Secretary	Frank Paradiso	631.632.2791	631.632.1473	secretary@ashraeli.org
Board of Governors	Ken Mueller	201.395.3761	763.231.6924	bog1@ashraeli.org
Board of Governors	James Hanna	718.269.3768	718.269.3794	bog2@ashraeli.org
Board of Governors	Bill Artis	201.395.3750		bog3@ashraeli.org
Board of Governors	Richard Rosner, P.E.	631.737.9170	631.737.9171	BOG4@ashraeli.org

### ASHRAE 2015/2016 COMMITTEES

COMMITTEE	NAME	PHONE	FAX	EMAIL
Programs & Special Events	Charles Lesniak, P.E			programs@ashraeli.org
Membership	Ken Mueller	201.395.3761	763.231.6924	membership@ashraeli.org
Chapter Technology Transfer (CTTC)	Don Kane, P.E.	631.737.9170	631.737.9171	cttc@ashraeli.org
Grassroots Government Activities Committee	Charles Lesniak, P.E			ggac@ashraeli.org
Newsletter Editor	Liset Cordero	212.643.9055	212.643.0503	editor@ashraeli.org
Research Promotion	Andrew B. Dubel, P.E.	212.967.7651	212.967.7654	rp@ashraeli.org
Historian	James Hanna	718.269.3768	718.269.3794	historian@ashraeli.org
Student Activities	Richard Halley	718.269.3809	718.269.3725	sa@ashraeli.org
Chapter Regional Conference Committee	Richard Halley	718.269.3809	718.269.3725	crc@ashraeli.org
Young Engineers in Training	Frank Paradiso	631.632.2791	631.632.1473	yea@ashraeli.org
Webmaster	Richard Rosner, P.E.	631.737.9170	631.737.9171	web@ashraeli.org
Nominating	Michael Gerazounis, P.E., LEED AP	212.643.9055	212.643.0503	nominating@ashraeli.org
Reception & Attendance	Bill Artis	201.395.3750		reception@ashraeli.org
PR & Engineering Joint Council of LI	Andrew Manos, LEED AP	631.632.2791	631.632.1473	pr@ashraeli.org
2014 CRC Committee	Richard Halley	718.269.3809	718.269.3725	CRC@ashraeli.org
Golf Outing	Peter Gerazounis, P.E., LEED AP Steven Friedman, P.E., HFDP, LEED AP	212.643.9055 212.354.5656	212.643.0503 212.354.5668	golf@ashraeli.org

ASHRAE LI, P.O. Box 79, Commack, NY 11725

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## Chapter Monthly Meeting - Program for 2015/2016

<b>September 8, 2015 * At Westbury Manor</b>  Dinner Presentation – Commissioning Considerations for VRF Systems Presenter: Bill Artis <b>**1 PDH**</b>	<b>February 2016</b> <b>NATIONAL ENGINEERS WEEK</b>
<b>October 20, 2015 * At Westbury Manor</b>  Dinner Presentation— “Dr. Duct Tape” Presenter: Max Sherman, PhD <b>**1 PDH**</b> <b>ASHRAE DISTINGUISHED LECTURER</b> <i>Back to Basic Session I -</i> <b>**1 PDH**</b> <i>“Selecting and Designing Refrigeration Equipment Component Packages”</i>	<b>March 8, 2016 * At Westbury Manor</b> Dinner Presentation— TBA Presenter: TBA <b>**1 PDH**</b> Joint meeting with LI-Geo YEA Night <i>Back to Basic Session III –</i> <b>**1 PDH**</b> <i>“Design &amp; Theory of ”</i>
<b>November 10, 2015 * At Westbury Manor</b> Dinner Presentation-- Phenolic Duct Construction Standards Presenter: Eli P. Howard, III <b>**1 PDH**</b> <b>Resource Promotion Night</b> <b>Joint meeting with SMACNA</b> <b>Student Activities Night &amp; YEA Night as well as</b> <b>Membership Promotion and Upgrade Night</b>	<b>April 12 , 2016 (5 PM)</b> <b>ANNUAL FIELD TRIP</b> . <b>**1 PDH**</b> Dinner to follow at a local Restaurant
<b>December 8, 2015 * At Westbury Manor</b> <b>HOLIDAY PARTY</b> Free Buffet Dinner for Members	<b>May 12th, 2016 * Cherry Valley Club, Garden City, NY</b> <b>ANNUAL GOLF OUTING</b>
<b>January 12, 2015 * At Westbury Manor</b> Dinner Presentation- TBA Presenter: TBA <b>**1 PDH**</b> <i>Back to Basic Session II -</i> <b>**1 PDH**</b> <i>“Design of “</i>	<b>May 12, 2015 * At Westbury Manor</b> Dinner Presentation— TBA Presenter: TBA <b>**1 PDH**</b> <b>Student Activities Night</b> <b>Refrigeration Night</b>
<b>January 2016</b> ASHRAE Winter Meeting	<b>June 14, 2016 * At Westbury Manor</b> <b>Free Buffet Dinner for Members</b> <b>PAST PRESIDENTS NIGHT &amp; OFFICER INSTALLATION</b> <b>STUDENT SCHOLARSHIPS TO BE AWARDED</b> <b>ASHRAE History Quiz and prize Give-A-Ways</b>
<b>February 9, 2016 * At Westbury Manor</b> Dinner Presentation—TBA Presenter: TBA <b>**1 PDH**</b> <b>Joint Meeting with USGBC</b> <b>Resource Promotion Night</b> <b>Membership Promotion Night</b>	<b>August 2016</b> <b>Chapter Regional Conference (CRC) Region I</b>

## BOG Meeting Minutes

### President (Tom Fields)

- Constant Contact
- Host PDF's of Newsletter

### Secretary (Frank Paradiso)

- Motion Approved for meeting minutes
- Need email (ASHRAE LI) Account and Log in in order to create Facebook and Linked In

### Programs (Charlie Lesniak)

- SMACNA
- USGBS
- Joint Meeting w/ NYC night?
- Finish up Speakers and meetings /opening for 2 months

### Chapter Technology Transfer (Don Kane)

- Ice Makers Field Trip

### Treasurer (Rich Halley)

- Opening Balance = \$17,938.79 (As of October 20th 2015)
- Allocation of \$388.68 for Constant Contact
- CRC Form outstanding submit

### CRC

- Formal meetings 4th Tuesday of month starting next month?
- Video for CRC will be worked on soon

### Grassroots Government Activities (Charles Lesniak)

- List of Government officials
- Engineers Week, Daikin McQuay @ Plainview Holiday Inn?

### Historian (James Hanna)

- Interview PE for next Newsletter

### Research Promotion (Andrew Dubel)

- A little over \$1000
- Book invoice went out to 40 reps
- Goal is \$17,000/\$26,000
- RP Thank you is November
- Orvis skeet shooting event?

### Student Activities (Rich Halley)

- Stony Brook - 13
- Suffolk CC - 10
- NYIT - 1
- 24 total
- Stony Brook Student Chapter has registered for the design project for load calculations and equipment selection

### YEA (Frank Paradiso)

- Target potential and current YEA members with Facebook and LinkedIN
- November is RP and Student Activities Night
- Ideas for YEA events: Mondays at Chili's with informal speakers to limit chapter cost
- Field trip to sheet metal shop/beer hall/brewery

## Long Island Chapter - Past Presidents

1958	H. Campbell, Jr. PE	1987	Abe Rubenstein, PE
1959	Clyde Alston, PE	1988	Michael O'Rourke
1960	Sidney Walzer, PE	1989	Mel Deimel
1961	Sidney Gayle	1990	Robert Rabell
1962	William Kane	1991	Gerald Berman
1963	Louis Bloom	1992	Donald Stahl
1964	Milton Maxwell	1993	Ronald Kilcarr
1965	Will Reichenback	1994	Jerald Griliches
1966	Joseph Minton, PE	1995	Walter Stark
1967	Irwin Miller	1996	Joe Marino
1968	Walter Gilroy	1997	Norm Maxwell, PE
1969	Charles Henry	1998	Alan Goerke, PE
1970	William Wright	1999	Frank Morgigno
1971	Louis Lenz	2000	Michael Gerazounis, PE, LEED AP
1972	Ronald Levine	2001	Ray Schmitt
1973	Henry Schulman	2002	Steven M. Stein, PE
1974	Myron Goldberg	2003	Andrew Braum, PE
1975	John N. Haarhaus	2004	Claudio Darras, P.E.
1976	Richard K. Ennis	2005	Craig D. Marshall, P.E.
1977	Kenneth A. Graff	2006	John Nally
1978	Evans Lizardos, PE, LEED AP	2007	Peter Gerazounis, PE, LEED AP
1979	Albert Edelstein	2008	Steven Friedman, PE, HFDP, LEED AP
1980	Ralph Butler	2009	Steven Giammona, P.E., LEED AP
1981	Robert Rose, PE	2010	Nancy Román
1982	Timothy Murphy, PE	2011	Carolyn Arote
1983	Leon Taub, PE	2012	Brian Simkins, LEED AP
1984	Raymond Combs	2013	Andrew Manos, LEED AP BD+C
1985	Edward W. Hoffmann	2014	Richard L. Rosner, P.E.
1986	Jerome T. Norris, PE		



## PAOE POINTS FOR 2015/2016

Chapter Members	Membership Promotion	Student Activities	Research Promotion	History	Chapter Operations	CTTC	GGAC	Chapter PAOE Totals
282	0	0	310	0	545	425	175	1,455

## November Program



### Dinner Presentation

#### **“Phenolic Duct Construction Standards ”**

*Presented by*

**Eli P. Howard, III**  
**SMACNA**

**Attendees  
Will Earn  
1 PDH!**

<b>DATE:</b>	<b>TUESDAY, NOVEMBER 10, 2015</b>		
<b>Time:</b>	6:00 PM - Cocktails and Hors D'oeuvres 7:00 PM - Dinner Presentations 8:45 PM - Conclusion	<b>Fee:</b>	\$ 45.00 Member \$ 50.00 Guest \$ 15.00 Student
<b>Location:</b>	<b>WESTBURY MANOR</b> (516) 333-7117 1100 Jericho Tpke., Westbury, NY 11590 <b>Directions are posted at @ <a href="http://www.ashraeli.org">www.ashraeli.org</a>.</b>		
<b>Presentation:</b>	Based on the recently issued ANSI/SMACNA 022-2015 –“Phenolic Duct Construction Standards”, this presentation will cover the details of fabrication of ducts using foamed phenolic, aluminum skinned, board. This will include; the characteristics of the material, forming and sealing, connecting, reinforcement and proper use of hangers and supports.  <b>All attendees will receive <u>1 PDH</u>.</b>		
<b>About our Speaker:</b>	As SMACNA’s Executive Director Technical Services, <b>Eli Howard</b> has the overall responsibilities of the more than 30+ SMACNA Technical and ANSI Standards related to the HVAC and Sheet Metal Industry. Prior to joining SMACNA he was Manager of Technical Program Development for NEMI providing technical assistance to contractors in energy engineering and IAQ technologies. His experience also includes work with Marriott International as Mechanical Engineer for design/construction of hotels in the United States, Hong Kong and Poland. He has additional responsibilities as SMACNA Liaison to NFPA 90A & 90B, CSI, USGBC, ICC and IAPMO. Mr. Howard holds a degree in Mechanical Engineering from Allegheny College.		

CHAPTER MAY NOT ACT FOR SOCIETY

An International Organization



## Young Engineers in ASHRAE (YEA)

The Long Island chapter meeting on November 10th, 2015 is Student Activities and YEA Night. This meeting will be a great way to learn about what being a member of your local chapter of ASHRAE has to offer.

Being a student/younger member of ASHRAE brings great opportunities for our younger members to mingle with experienced professionals in the Engineering Industry. The mingling amongst a range of junior and more senior members is a good way for anyone to learn about the potential challenges, experiences and advice that any of our members have. Participation in the local chapter can also be a great learning experience during the monthly meetings because of technical presentations, new product technologies and the continued overall progression in the application of engineered systems.



Don't forget about some of the great programs that ASHRAE has for student members like the Smart Start Program:

SmartStart, a 3-year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly. The SmartStart program is the best way for ASHRAE student members to receive the many benefits of membership after graduating college.

We will be looking for ideas for social events so please contact the long island chapter if you have suggestions.

**Frank Paradiso**  
**YEA Chairman**



## Research Promotion

I would like to thank the companies who have participated in the annual 2016 Product Directory of Manufacturers and their Representatives. The Product Directory has been prepared as a service to all its members and as a service to the local HVAC industry. It will be made available to all ASHRAE and non-ASHRAE members at no-cost and can be obtained from our monthly meetings or directly from our web-site. There's still time if you would like your company listed in the directory please contact me. The deadline is December 15th.



The Directory is intended to provide better communications between manufacturers and their sales representatives; engineers who specify products; contractors who purchase and install the equipment; and other interested parties. Product Directory listings are not limited to ASHRAE members and the listings are not to be considered as advertising or endorsement by ASHRAE of any product, manufacturer or representative. This year's overall resource promotion goal is \$2,300,000 with over 75 research projects on board. Our chapter is expected to raise approximately \$17,000 (with a challenge goal of 28,491) towards the overall goal of which we have already raised \$3,495. I am hoping I can count on the continued support of all of our past contributors who have generously supported us over the years. I also look forward to gaining the support of new contributors this coming year. Please help support ASHRAE in any way you can.

I would like say 'thank you' to all the contributors listed below whom have already donated to ASHRAE this year:

### INDIVIDUALS

Frank D Morgigno  
Michael Gerazounis, PE  
John D Nally  
Andrew E Manos  
Donald W Kane, PE  
William Artis, Jr  
Richard L Rosner, PE  
Andrew B Dubel  
Charles J. Lesniak, PE,  
Robert J Fuchs  
Frank Paradiso

### COMPANIES

SMACNA - Long Island  
PVI  
Metro Air Products  
Technical Air Systems  
RPG Associates  
Albert Weiss  
VMC East  
MV Controls

### CONTRIBUTIONS CAN BE MADE IN THE FOLLOWING WAYS:

1) You can mail your checks, made out to ASHRAE Research Promotion, to:

Andrew Dubel, P.E.  
ASHRAE Research Promotion Chair  
c/o Lizardos Engineering Associates PC  
240 West 35th Street, Suite 304  
New York, NY 10001

2) You can bring your check to any of the meetings and give it to me. I will mail it into headquarters.

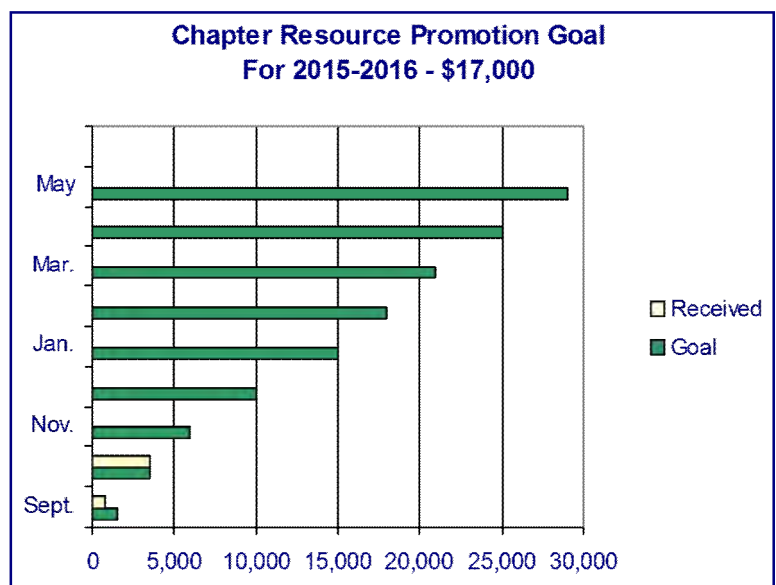
3) You can contribute via PayPal from the ASHRAE LONG ISLAND web site, just click on the donate button.

4) You can contribute directly on-line. [www.ashrae.org](http://www.ashrae.org)

**\* Please make sure you accredit your contribution to the LONG ISLAND CHAPTER 006 \***

Thank you again for all of your support!

**Andrew B. Dubel, P.E.**  
**Research Promotion Chair**

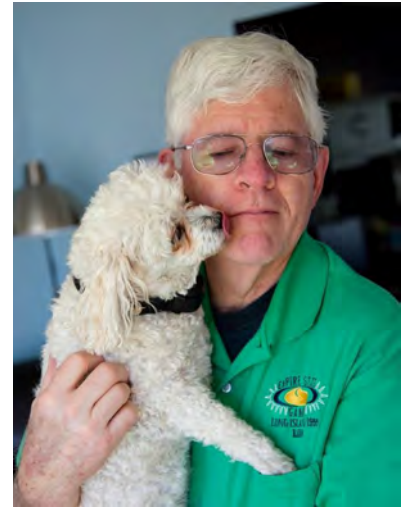




## CTTC - Poison Ivy, Wine and HVAC Ducts

An eclectic but related trio, with one common denominator - phenol, one of a number of chemically active compounds which are found throughout nature, especially in plants, whose molecules comprise a hydroxyl functional group (OH) bonded to the ring of an aromatic compound. While the phenol compounds in red wine are alleged to have health benefits and the ones in poison ivy are the cause of the itchy sensation after contact, we will be concerned with the combination of a phenol and an aldehyde to result in a phenolic resin. With the addition of an appropriate blowing agent, one can produce a closed-cell foam material, with excellent insulation (thermal) properties as well as sufficient mechanical strength to form panels which may be assembled into ductwork.

While not a new product (it has been around in one form or another for fifteen years or more), with the release this year of the first edition of SMACNA's Phenolic Duct Construction Standards (ANSI/SMACNA 022-2015), those wishing to explore the use of this alternative to conventional sheet metal ductwork will have some guidance while implementing this technology. As with all alternative technologies, some will not embrace it, as it is different, while others will treat it as the hammer in search of anything that looks like a nail. A reasoned exploration of the topic will reveal instances where the attributes of phenolic duct make it attractive to use, while other applications will include conditions which would preclude the use of the material.



A key advantage cited by the proponents of phenolic ducts is the lightweight of the finished assembly, in some cases only one fifth the weight of an equivalent sheet metal fabrication. This light weight translates into easier handling and installation, perhaps even a reduction in manpower needed, as one person can lift and position even a thirteen foot section of phenolic duct. This same advantage can have a negative side also, as the care needed to ship and unload will be more involved. Just piling the duct assemblies on the back of an open truck and strapping them down with ratchet straps until the material creases will result in more physical damage than with the typical sheet metal parts. As the phenolic ducts, unless specifically Listed otherwise, are suitable for indoor use, transport in an open truck, subject to weather could adversely affect the longevity of the material. While it is not uncommon for sheet metal to arrive on site with minor dents and bends, it is generally not too difficult to ameliorate the damage. Repairing damaged phenolic ductwork could be more problematic due to the need to follow very specific guidelines issued by the supplier of the material to assure proper sealing and attachment. Further, although the scope of UL-181 does allude to the field fabrication of ducts, the scope of UL-181A ("Standard For Closure Systems For Use With Rigid Air Ducts") appears to limit the use to ... "factory-made rigid air ducts". Thus field repairs, even if accomplished using specified materials, could void the UL Listing of the product, if used outside of its scope.

Since, unless otherwise tested and Listed, the UL Listing is for indoor use of the duct assemblies (and the tape used to fasten them), factory fabricated assemblies would have to be protected from the elements during transport, storage and installation into buildings which have not yet been closed in.

Interestingly, there is at least one supplier of phenolic ducts intended for outdoor use, which does not use adhesives or tape, but, rather, relies upon a vinyl "skin" for mechanical integrity as well as weather resistance. (One wonders if this method, without use of adhesives, fasteners and/or tape would be considered to comply with the SMACNA standard?)

One claim made by the supporters of the phenolic ducts is that of drastically reduced leakage. Since it is possible to properly seal a sheet metal duct assembly, and ASHRAE 90.1 has upgraded the requirements to a seal class A, the real question is one of economics. Which assembly is easier/cheaper to seal.

It should be noted that, due to the maturity of the sheet metal duct fabrication process, there are numerous "generic" hardware solutions for fabrication, installation and repair of sheet metal ducts. Some of the phenolic duct solutions, on the other hand, require very specific hardware and accessories, sometimes only available from the manufacturer. Should another product be substituted, the Listing of the assembly could be voided.

Another benefit claimed for the phenolic ducts is their "Greenness", with much made of using blowing agents with low or zero Global Warming Potential and Ozone Depletion Potential. As Tevye would say, on the other hand....sheet metal doesn't need any blowing agent, and...at least one supplier of phenolic duct provides the following cautions:

- *Grinding, crushing and severe mechanical processing of the phenolic product may result in "nuisance dusts". Exposure to high concentrations (what is high??) may give rise to mechanical irritation of the eyes, skin, nose and throat.*

## CTTC - Poison Ivy, Wine and HVAC Ducts (Cont'd. from Page 9)

- *This grinding/crushing may result in the release of residual blowing agent gases which may accumulate to ignitable concentrations in unventilated spaces, and generation of dust can form combustible concentrations.*

Note that this last caveat could mean having to categorize the fabrication area as a Class II, Division 1 or 2 Hazardous location, with the need for appropriate wiring and equipment.

An additional caution by one manufacturer is in regard to the reflective surface of the aluminum skin on the duct material resulting in eye damage or sunburn, unless prophylactic steps are taken. The flatness of the surface forms a mirror of sorts, and it is possible that reflected sunlight could be an issue in some locations, similar to the foil faced reflectors that people use to dose their facial tissue with UV-A and UV-B at the beach. While a good pair of dark glasses and a long-sleeved shirt will alleviate the solar issue, the generation of "nuisance dust" is something to be considered if one plans on performing any mechanical cleaning of the ducts further into their lifetime. Purportedly, if the exposed phenolic foam is exposed to water, especially so when in a fine powder form, the resulting fluid will be on the acidic side, but more on that later.

Where can the phenolic duct NOT be used? Where fire rated duct work is required; for kitchen and grease hood ventilation; and chemical fume and smoke exhaust systems, as well as any application where the temperature limit (185° F) is exceeded. This could, possibly, limit use in system provided with a smoke purge function in conjunction with the fire protection system. The 185° F limit is not just for the temperature inside the duct. It cannot be located in juxtaposition to any device that can attain that temperature.

A positive attribute of this duct material is the fact that the insulation is already part and parcel to the duct. No insulation wrap is needed, which means not as much space has to be provided around the duct. Keep in mind, however, that it will still be necessary to get to access doors, dampers and components such as VAV boxes, which will require some additional space be allowed. On a multi-story building, saving six inches or so in ceiling height can have a significant effect on building cost, which is one of the strong drivers of this material.

Much is made of the "fiber free" nature of the duct interior. As true as this is, improper cleaning could lead to mechanical damage to the interior aluminum skin (which is sometimes thinner than the external aluminum skin) with the resultant generation of "nuisance dust", as noted above. Similarly, the UL-181 listing of the duct is cited in comparison with sheet metal. Since this is, essentially, a flame propagation test, it would not be germane to a sheet metal duct.

It is noted that the SMACNA document details the several ways of assembling the phenolic duct, either with adhesives and tape, or with mechanical fasteners and tape. The use of a three inch wide, UL-181A-P tape is required (one and one-half inch on each side of the corner seam) to seal the closing seam in the duct. As UL Listed (to 181A-P) tape is available in widths of two and one-half inches, care must be taken to make sure the correct width tape is used for this closure. There are other locations where SMACNA allows a narrower tape (where the phenolic panel fits mates with the four-bolt flange. Having two different width tapes, while saving a little material, if it leads to misuse and rework, may turn out to be poor economy!

Before getting away from tape...one of the UL Listed 181A-P tapes bears a manufacturers note that: ... "Hazardous decomposition will occur...under fire conditions. Various harmful compounds could be formed during combustion...". With the longitudinal seams and many facing joints employing this kind of tape, one must question what kind of compounds will be liberated and, especially if only under fire conditions, why would you want further degrade the air quality? Incidentally, if UL Listed (181A-P) tape is being used, it will be surface printed every 36 inches with the manufacturer's identification, catalog number, date of manufacture and the marking 181A-P.

After forming the duct and sealing the final longitudinal joint with tape, the standard calls out for a bead of sealant along each of the internal inside corners, applied with a radius. On smaller sized duct cross-sections, access to properly accomplish this may be challenging, as it will be for the turning vanes in elbows. One must wonder if, in time, the RTV type material will act to trap dust particles, which will trap more dust particles, leading to restriction, noise and, of more concern, a place for biologicals to grow.

The SMACNA standard provides numerous details related to installation of accessory components (access doors, dampers, grilles, registers and fire dampers). Perhaps this would be a good time to require provision for testing and balancing ports, which could be provided with plugs and bushings to prevent exposure of the phenolic core to the air flow and moisture. It wouldn't be a bad idea to do this on sheet metal ducts as well, but the need to keep the integrity of the core material intact makes this application almost cry out for it. Also note that when squeezing these ducts into the small

## CTTC - Poison Ivy, Wine and HVAC Ducts (Cont'd. from Page 10)

space based on the lack of need for adding insulation, keep the balancer in mind. He or she still needs to get access to the ducts.

From a quick search of suppliers of duct systems fabricated from the phenolic material it appears that most (all?) of the accessory fittings that mate with the phenolic board seem to be of aluminum construction. This is, certainly, a positive from the weight perspective, however, one must wonder if this has any relation to the experience of the roofing industry 15 to 20 years ago, when a similar product was used for roof insulation, in contact with steel decking. With the moisture levels encountered in that application and the acidic nature of the solution formed when the water and phenolic made contact, deck corrosion (on both painted and galvanized decking) occurred. While the aluminum components should fare better in this application, care must be taken when selecting hangers and other ancillary pieces to ensure that galvanic couples are not formed with the aluminum parts.

In summary...the technology seems to offer some real positives for certain applications but will require people to learn the proper installation methods, if all the benefits are to be realized.

**Don Kane, P.E.**

**CTTC Chair - [cttc@ashraeli.org](mailto:cttc@ashraeli.org)**

## Grassroots Government Activities Committee (GGAC)

As most of you know ASHRAE is no longer a US based society it has moved itself to a global society, ASHRAE wanted to start a new committee in their local chapters to help it grow globally so it created the GGAC. The main purposes of the GGAC is to serve as a communicator between the local ASHRAE chapters and national, serve as a communicator between the local ASHRAE chapters and other trade organizations, and to update local government officials on ASHRAE standards and technical issues. Please look at the ASHRAE's main GGAC webpage at <https://www.ashrae.org/government-affairs/> for more information what the GGAC is doing nationally. The latest topics which ASHRAE is participating in can be found at the link: <https://www.ashrae.org/government-affairs/government-affairs-updates/government-affairs-updates-10-02-2015#4>



For this ASHRAE season we will have three joint engineering meetings and we are looking to see if other organizations would like to join us for joint meetings for the next ASHRAE year. This month we are having our first joint meeting and it will be with SMACNA Long Island <https://www.smacna-li.org/>. In February we will hold a joint meeting with the USGBC Chapter of Long Island <http://usgbc-li.org/>, and in March with Long Island Geo <http://www.li-geo.org/>. In addition to our joint meetings we will have presentations for National Engineering Week with EJCLI <http://www.ejcli.org/>.

Please contact me if your organization would like to join us for a joint meeting.

**Charlie J. Lesniak, P.E.**

**Grassroots Government Activities Chair**

## Student Activities

Student meetings are underway at our SUNY Stony Brook and Suffolk Community College Chapters. This year we have welcomed 20 new student members so far and we look forward to adding more this month.

Our November meeting is designated a student activities night. We welcome our student members to this meeting. The dinner meeting will be free for those student members. In addition we will be supporting students who decide to join our chapter. Bring your filled out membership application for student membership! We look forward to seeing you. If you haven't seen it yet ASHRAE Student Zone <http://www.ashrae.org/membership--conferences/> student-zone is a great place for student to go on line and learn more about ASHRAE and the multiple resources available to you.



The ASHRAE Senior Undergraduate Project Grant Program is still accepting applications. This program provides grants to engineering, technical and architectural schools worldwide with the goal of increasing student knowledge, learning and awareness of the HVAC&R industry through the design and construction of senior projects. Grants are to be used to fund equipment and supplies for senior projects and 2-year technical school projects that focus on ASHRAE-related topics. Grants may cover projects lasting from one academic term up to one year. See the Student Zone for more information.

Students who are currently enrolled or soon to be enrolled in an engineering undergraduate degree should take a look at [www.ashrae.org/scholarships](http://www.ashrae.org/scholarships). There are 13 undergraduate scholarships available ranging from 10,000 to 3,000 dollars!

If you would like more information take a look at the website or see me.

***Richard Halley***  
***Student Activities Committee Chair***

## Membership

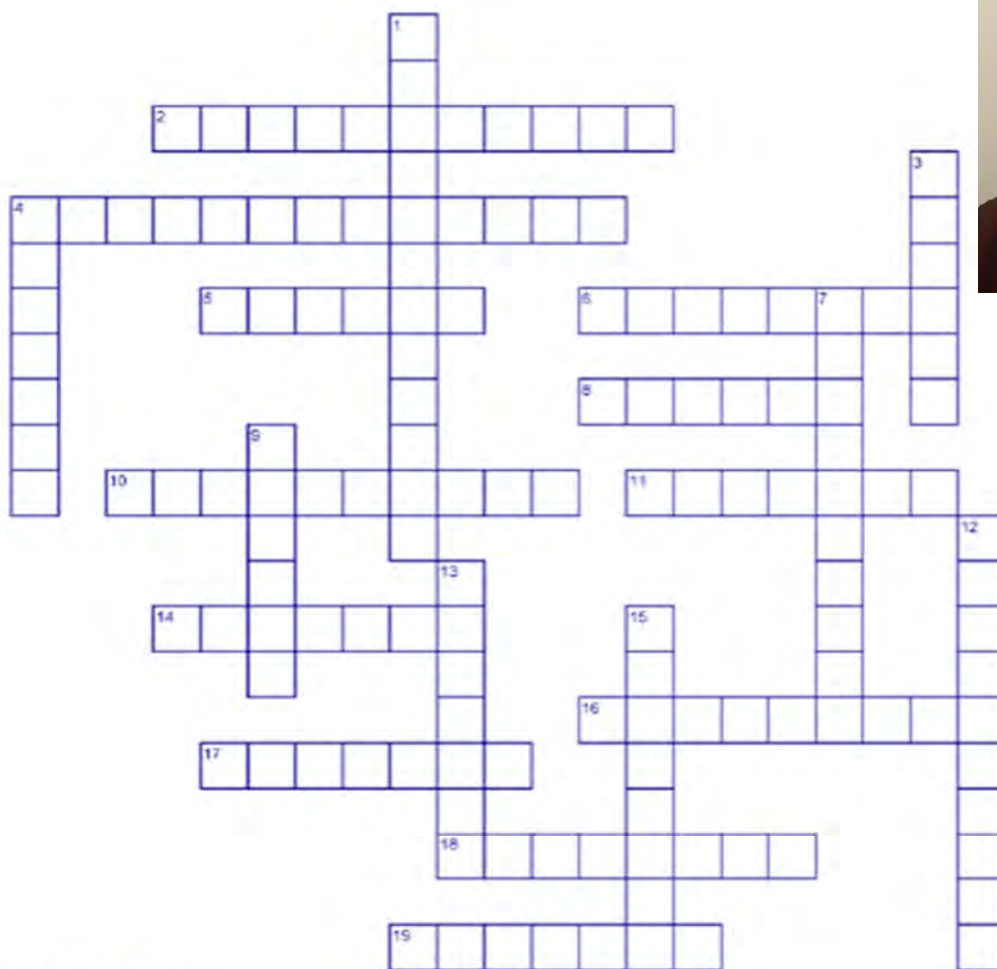
This month's chapter meeting will be quite active, as it is a joint meeting with the Long Island Chapter of SMACNA. It is also our Membership Promotion, Student Activities, and Young Engineers in ASHRAE nights. There will be excellent opportunities for all to network and make acquaintances. Please encourage any people associated with the HVAC&R community to attend this meeting. As always, you can join ASHRAE online at [ASHRAE.org](http://ASHRAE.org).

As it is also Student Activities Night, I want to let our senior students know about the Smart Start Program. It is the best way for ASHRAE student members to continue receiving the many member benefits of ASHRAE after finishing college. The program allows new graduates to pay only \$20 for the first year of associate membership after college, \$74 for the second and \$95 for the third. This is a \$417 savings. Upgrading from student to associate member allows you access to all ASHRAE has to offer, including annual copies of the ASHARE Handbook, the ASHRAE Journal, and various other publications and services. Please contact me with any questions regarding the Smart Start Program.

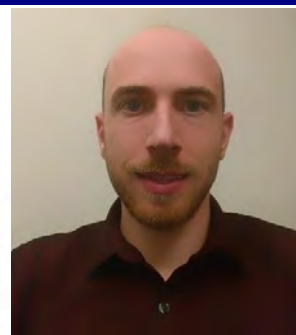
***Ken Mueller***  
***Membership Chairman***



## History - It's Puzzle Time! (See page 17 for answers)



www.CrosswordWriters.com



### ACROSS

- 2 Hotel hosting chapters silver anniversary dinner dance
- 4 Club hosting chapters annual golf outing
- 5 Proudly displayed at our monthly meetings
- 6 Chapters first president
- 8 Chapter president ten years back
- 10 April 2006 field trip to this laboratory
- 11 Location of recent presidential debate and our 1980 chapter meetings
- 14 April 2009 field trip
- 16 1975 Long Island CRC location
- 17 Picture on February 1991 ASHRAE Journal
- 18 Chapter president in 1973
- 19 Name of chapters newsletter

### DOWN

- 1 November 1980 chapter field trip to this airline terminal
- 3 1993 chapter historian
- 4 Received by our chapter in October of 1957
- 7 This newsletter format started in 2002
- 9 Recent special chapter anniversary
- 12 Location of April 1995 past presidents meeting
- 13 Chapter operating guidelines
- 15 1989 Long Island CRC location

**James Hanna**  
History Chairlman

## ASHRAE Learning Institute - 2015 Fall Online Course Series

# ASHRAE Learning Institute

## 2015 Fall Online Course Series

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**Note:** You may register up to 24 hours prior to an online course. Courses are in US Eastern Time. **Earn CEU/PDH credits.**

#### Energy Management Best Practices

Mon, October 12, 2015 – 1:00 pm to 4:00 pm EDT

#### Complying with Standard 90.1-2013: HVAC/Mechanical

Wed, October 14, 2015 – 1:00 pm to 4:00 pm EDT

#### Commissioning for High-Performance Buildings

Mon, October 19, 2015 – 1:00 pm to 4:00 pm EDT

#### Combined Heat & Power: Creating Efficiency through Design & Operations

Mon, October 26, 2015 – 1:00 pm to 4:00 pm EDT

#### Laboratory Design: The Basics and Beyond

Mon, November 2, 2015 – 1:00 pm to 4:00 pm EST

#### Fundamental Requirements of Standard 62.1- 2013

Wed, November 4, 2015 – 1:00 pm to 4:00 pm EST

**The following course is comprised of two parts. Registrants must attend both parts in order to receive CEU/PDH credits.**

#### Commissioning Process in New & Existing Buildings

Part 1 - Wed, October 21, 2015 – 1:00pm to 4:00pm EDT

Part 2 - Wed, October 28, 2015 – 1:00pm to 4:00pm EDT

## ASHRAE HVAC Design Training

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Gain practical skills and knowledge in designing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

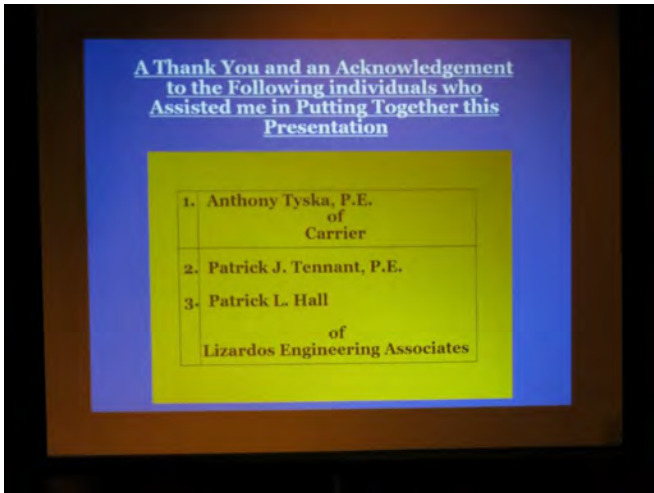
#### HVAC Design: Level II – Applications - Registration is \$854 (\$699 ASHRAE Member)

*HVAC Design: Level II — Applications* provides instruction on HVAC system design for experienced HVAC designers and those who complete the HVAC Design: Level I – Essentials training. The training provides information that allows practicing engineers and designers an opportunity to expand their exposure to HVAC systems design procedures for a better understanding of system options to save energy.

Visit [www.ashrae.org/hvactraining](http://www.ashrae.org/hvactraining) to register.



## October Meeting Pictures



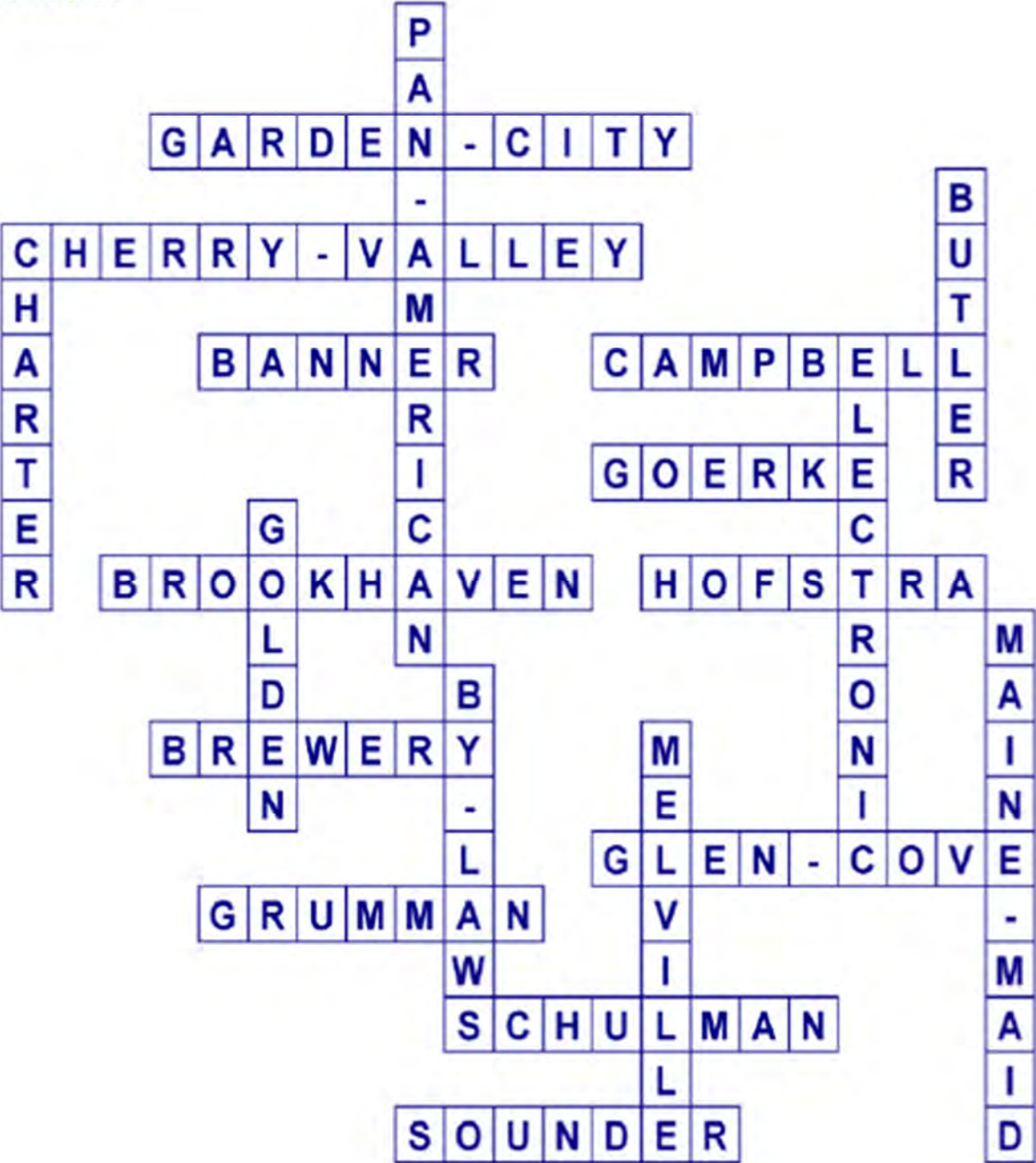
## October Meeting Pictures (Cont'd. from Page 16)





History Puzzle Answers (From page 14)

Solution:



**2016 ASHRAE Winter Conference - January 23-27, Orlando, FL**A promotional banner for the 2016 ASHRAE Winter Conference. The background features a modern skyscraper with a blue and gold facade. The ASHRAE logo is in the top right corner. The main text reads "2016 ASHRAE Winter Conference" in large, bold letters. Below it, the dates and location are listed: "Jan. 23-27 | Orlando Hilton | Orlando, Fla.". A line of text describes the conference: "New Technical Program Tracks, Networking, World's Largest HVAC&R Marketplace". In the bottom left, there is a logo for the "2016 AHR Expo" with dates "Jan. 25-27 | Orange Co. Conv. Center | Orlando, Fla.". A black box on the right contains the text: "Venues are strategically located next to each other for easy access.".

# 2016 ASHRAE Winter Conference

Jan. 23-27 | Orlando Hilton | Orlando, Fla.

*New Technical Program Tracks, Networking,  
World's Largest HVAC&R Marketplace*

**2016 AHR Expo**  
Jan. 25-27 | Orange Co.  
Conv. Center | Orlando, Fla.

Venues are strategically located next to each other for easy access.

With new tracks focused on design-build practices and residential systems as well as programs that align well with current trends in HVAC&R engineering, you don't want to miss the Technical Program at ASHRAE's 2016 Winter Conference. Energy efficiency and sustainability are emphasized along with current engineering and construction practices outside of the U.S. and Canada.

**Early Bird registration** offering the lowest registration costs ends Nov. 2. Register to take advantage of these fees. For more information or to register, visit [www.ashrae.org/orlando](http://www.ashrae.org/orlando).

The Technical Program features eight tracks, some 100 sessions and more than 300 speakers. Over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license, including the state of Florida, AIA LUs and LEED®AP credits are available.

Check out the new **interactive schedule** to find the topics, sessions and speakers of most interest to you! Featuring options to search by track, program type, date and keyword, the interactive Technical Program provides a detailed look at each session from color-coded tracks to sponsoring committees. Access, browse and bookmark the feature on your computer, tablet or smartphone.



The interactive schedule for the Technical Program is available at [www.ashrae.org/orlandointeractivetechprogram](http://www.ashrae.org/orlandointeractivetechprogram).

In addition to sessions providing updates on industry standards and ASHRAE publications, the Conference features several innovative sessions in the Cutting Edge and International Design tracks as well as residential programs, numerous refrigerant update presentations, especially on low global warming potential, and fundamentals, applications, system and equipment sessions.

For more information or to register, visit [www.ashrae.org/orlando](http://www.ashrae.org/orlando)



## Fall 2015 Online Courses



*CEU/PDH Credits Available!*

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1-800-527-4723 (US and Canada)  
or 404-636-8400 (worldwide)

NOTE: You may register up to 24 hours prior to an online course. Course times are in Eastern US Time Zone.

## Fall 2015 Online Courses

### Commissioning

#### Commissioning for High-Performance Buildings

Mon, October 19, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Walter Grondzik, P.E., Fellow/Life Member ASHRAE, LEED® AP

#### Commissioning Process in New & Existing Buildings

Part 1 - Wed, October 21, 2015, 1:00 pm to 4:00 pm, EDT /

Part 2 - Wed, October 28, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Rick Casault, P.E., Member ASHRAE

### Environmental Quality

#### Humidity Control: Applications, Control Levels, and Mold Avoidance IAQ Practices

Wed, September 16, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Lew Harriman, Fellow ASHRAE

### Energy Efficiency

#### Energy Management Best Practices ES Practices

Mon, October 12, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Richard Pearson, P.E., Fellow/Life Member ASHRAE

#### Combined Heat & Power: Creating Efficiency through Design & Operations IAQ Practices

Mon, October 26, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Lucas Hyman, P.E., Member ASHRAE, LEED® AP

### HVAC Applications

#### Introduction to BACnet®

Mon, September 14, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** David Fisher, Member ASHRAE

#### Designing High-Performance Healthcare HVAC Systems

Mon, September 21, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** Daniel Koenigshofer, P.E., Member ASHRAE, HFDP

#### Laboratory Design: The Basics and Beyond

Mon, November 2, 2015, 1:00 pm to 4:00 pm, EST

**Instructor:** John Varley, P.E., Member ASHRAE, HBDP, LEED® AP

### Standards & Guidelines

#### Fundamental Requirements of Standard 62.1-2013 IAQ Practices

Wed, November 4, 2015, 1:00 pm to 4:00 pm, EST

**Instructor:** Hoy Bohanon, P.E., Member ASHRAE, BEAP, LEED® AP

#### Complying with Standard 90.1-2013: HVAC/Mechanical ES Practices

Wed, October 14, 2015, 1:00 pm to 4:00 pm, EDT

**Instructor:** McHenry Wallace, P.E., Member ASHRAE, LEED® AP



**Save-the-Date - ASHRAE Webcast - April 21, 2016**

**SAVE THE DATE!** April 21, 2016 | 1–4 pm EDT

This webcast will feature industry experts who will define the importance of, and why we should strive for, net zero in the built environment. Viewers will be able to identify behaviors that create more effective ownership, design and construction teams, and will recognize the value of a collaborative process in building design and the impact on costs. With a strong emphasis on real-world applications, the program will also discuss the primary technical and financial challenges in achieving net zero buildings, and where this design approach can best be applied.

- Take advantage of the **two week On Demand period from April 22 – May 6** and schedule your viewing of the webcast around your time zone and schedule
- The On Demand player has fast forward and rewind capabilities — allowing you to view all or part of the program with your members
- Plan a lunch or dinner meeting with your Chapter to view the webcast
- Utilize the Net Zero Resources online to supplement the webcast program
- Earn 3 FREE PDHs
- Chapters who register to view the webcast will earn **100 PAOE points**

**Visit [www.ashrae.org/webcast](http://www.ashrae.org/webcast) for additional information about the program, sponsorships, continuing education credits, speakers, and registration.**

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ASHRAE-LI is now offering Ticket Books for our Monthly Meeting/Dinner presentations. \$450 for a book of Eleven (that's right....eleven, one better than ten) tickets for the price of ten member admissions. Tickets are valid until December of 2017 and may be used by members and non-members. For those of you who attend all or most of our meetings and for organizations who normally send large groups to the meetings, this is a great way to save a few dollars and speed up the entry process. For more information and/or to purchase ticket books, please contact Don Kane at [cttc@ashraeli.org](mailto:cttc@ashraeli.org) or call 631-574-4870.



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