ASHRAE Philadelphia Chapter

October 2020
Volume 56, Issue 2

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Quaker City Climate

Tuesday, October 13, 2020
12:00 Noon to 1:30 PM
Virtual Meeting

"Design-Build-Operate-Maintain: What Could Possibly Go Wrong?"

presented by

Charles E. Gulledge III, P.E., HBDP, LEED AP, Fellow ASHRAE,
2020-21 ASHRAE President

GBCI Approved| 1 CE| 0920020144
AIA Approved| 1 LU| DBOM19

Built solutions rely on numerous participants to plan, design, construct, operate, and maintain. This program takes a whimsical look at real world traps that can/do occur and offers a lessons learned perspective on how to mitigate/avoid recurrence. Content covers the following topics:

- The Design Disconnect
- The Construction Disconnect
- The O&M Disconnect

There is no charge for this session,
However, you must register in advance to receive the login information via email prior to the event date.

Click here to register.

There is still space available in the Philadelphia Chapter's Basic HVAC Design Course!
Classes begin on October 13th.

See page 12 for more details.

2020-2021

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Young Engineers in ASHRAE
Tyler Holland

PRESIDENT'S MESSAGE

Fellow Chapter Members –

We are officially off and running with the Chapter year and thanks to your support we are starting strong. We had 150 attendees for Dr. Bahnfleth's webinar on Infectious Aerosols and Impact of COVID-19 on HVAC Systems. This is the largest number of attendees at a chapter meeting that I can recollect. As mentioned in the September President's Message, one of the benefits of our virtual format is the ability to reach a larger audience which we are continuing to see. Hopefully everyone that was able to attend found the discussion informative. I know I did.

To me, the September meeting was an example of what ASHRAE means to our industry. ASHRAE guides us through research, standards writing and publishing, among other efforts. When we have questions about how to deal with situations or new problems arise, ASHRAE provides a rudder to help steer us in the right path. I felt like Dr. Bahnfleth's talk helped ground the current discussion and shed light on the science and scientific studies, past and present, on the topic.

We are also seeing a strong level of Chapter participation in other areas. We have approximately 20 people registered for the Basics Class and are expecting a good turnout for the golf outing. Although it may be in different formats or venues this year, we greatly appreciate the involvement.

In October we will be joined by current ASHRAE Society president Charles Gulledge, P.E. President Gulledge will be teaching us lessons from his experience in the hopes we can all learn from them. In addition, he will provide an ASHRAE update from a Society perspective. October's meeting will be a Student Activities and YEA promotion event so please encourage any students you know or YEA colleagues to register. Hoping to "see" everyone there and at future events in the coming months.

Tim Reinking
Philadelphia Chapter President
c021@ashrae.net

October Meeting Presenter

Charles E. Gulledge III, P.E., HBDP, LEED AP, Fellow ASHRAE
2020-21 ASHRAE President

Charles E. Gulledge III, P.E., HBDP, LEED AP, Fellow ASHRAE, is ASHRAE's President for the 2020-21 term. Gulledge previously served on the ASHRAE Board of Directors as president-elect, treasurer, vice president and director-at-large. For his time and dedication to ASHRAE and the industry, he is the recipient of numerous awards including the Exceptional Service Award, Distinguished Service Award, Chapter Service Award, Regional Award of Merit, two ASHRAE Technology Awards and the Dan Mills Technology Award.

His theme for the 2020-21 ASHRAE Society Year is "*The ASHRAE Digital Lighthouse and Industry 4.0*."
"Why should we engage in digital transformation? To gain a competitive advantage amongst our peers, position ourselves as the go-to resource for clients, improve margins, provide greater value, and attract and retain a digitally skilled workforce."

In addition to his time served on the Board of Directors, Gulledge has served as chair of the Members Council and the President-Elect Advisory Committee, chair of the Finance Committee, chair of the Standards Membership Ad Hoc Committee, chair of the Development Committee for Fundraising, and as an ASHRAE Distinguished Lecturer. He has held ASHRAE Society-level leadership roles on many standing committees, technical committees and presidential ad hoc committees.

Gulledge's theme focuses on reimagining the building industry and ASHRAE's place in it by integrating not only industry segments, but also technology.

"Digital transformation is not simply associated with adopting new technical solutions. Knowledge needs to be captured and linked in such a way that ALL relevant stakeholders' benefit. Doing so requires understanding of how to collect, store, and analyze data; so that it is insightful and actionable."

In addition to his contributions to ASHRAE, Gulledge's career in HVAC spans over 36 years. He entered the industry as an engineer-in-training with Parsons Brinckerhoff Quade & Douglas, working on transit system infrastructure, vehicular tunnels and moveable swing-span bridges. Over his career, he has served the built world in the roles of a consulting engineer, municipal owner and design-build contractor. Gulledge is currently a Senior Mechanical Engineer with Environmental Air Systems, LLC. He is registered as a professional engineer in the states of North Carolina, Georgia, Kentucky, South Carolina, Alabama and Virginia.



Gulledge's comprehensive design, construction and operational portfolio covers a variety of market sectors; including transportation, commercial, educational, institutional, lodging, sports, mission critical, life sciences, healthcare, pharmaceutical, manufacturing, industrial, archival, historical, and hospitality.

Gulledge is a 1983 graduate of North Carolina State University with a Bachelor of Science in Mechanical Engineering.

Invest in ASHRAE and Help Shape our Future - Give to ASHRAE RP Today!

ASHRAE's Research Promotion Campaign generates funds to support ASHRAE research, YEA, Education (ALI), Endowed Research through ASHRAE Foundation, YEA Programs, Scholarships, and the General Fund. Research, the backbone of ASHRAE, remains the primary fund of the program with over $2 million raised for this program annually.

All contributions received by ASHRAE significantly assist in ensuring that the Society continues to have the resources needed to sustain and expand its work. ASHRAE is very thankful for the support of all our donors and will strive to utilize all resources to better serve our members, the HVAC&R industry and society!

Click here if you would like to support ASHRAE's mission, programs, and member services with a gift through the RP Campaign.

If you have any questions, please contact the Philadelphia Chapter's Research Promotion Chair, Gary Debes, at c021rp@ashrae.net.

Thank you for your support!

Thank you to our 2020-2021 Corporate Sponsors!

The following companies are not only supporting the Philadelphia Chapter, but their participation in this program enables the Chapter to make a wonderful donation to Research Promotion, which includes over $1.5 million in local research funding.

Associated Marketing, Inc.
Bush Sales Associates, Inc.
Clapp Associates, Inc.
CM3 Building Solutions, Inc.
Cooney Coil & Energy, Inc.
Coward Environmental Systems, Inc.
Ernest D. Menold, Inc.
Finnegan Associates
GP Energy Products LLC
McHugh Engineering, Inc.
Pennergy Solutions
R.D. Bitzer Company, Inc.
Sass, Moore & Associates, Inc.
Tozour Energy Systems, Inc.

It's not too late to sign up! Click here!

ASHRAE®

Philadelphia Chapter

Sponsored by:

Burns

ASHRAE 90.1 Technical Seminar

*Rescheduled

Wednesday, March 24th
&
Thursday, March 25th

Live Instruction & Remote go-to-meeting

For More Information Contact: c021mem@ashrae.net or 610-971-2169

16 PDHs

Schedule

Wednesday March 24, 2021

7:30 - 8:00 AM	**Registration**
8:00 - 8:30 AM	**Intro, ECC, User's Manual, Scope:** Larry Spielvogel, PE Past 90.1 Chair
8:30 - 12:00 PM	**Building Envelope:** Joseph Deringer, AIA SuPerB, Past 90.1 Envelope Chair
12:00 - 12:45 PM	BREAK
12:45 - 1:30 PM	**Building Envelope:** Joseph Deringer, AIA SuPerB, Past 90.1 Envelope Chair
1:30 - 3:45 PM	**Lighting:** Carl Watson, PE Consulting Engineer and Code Official
3:45 - 5:00 PM	**Energy Modeling & App. G:** Michael Tillou, PE DOE PNNL, 90.1 ECB Committee

Thursday, March 25, 2021

7:30 - 8:00 AM	**Registration**
8:00 - 8:30 AM	**Intro, ECC, User's Manual, Scope:** Larry Spielvogel, PE Past 90.1 Chair
8:30 - 12:00 PM	**HVAC Systems:** Dick Lord Carrier, 90.1 Vice Chair & 90.1 Mechanical Committee
12:00 - 12:45 PM	BREAK
12:45 - 3:00 PM	**HVAC Equipment:** Dick Lord, Carrier, 90.1 Vice Chair & 90.1 Mechanical Committee
3:15 - 4:00 PM	**Service Water Heating:** Carl Watson, PE Consulting Engineer and Code Official
4:00 - 5:00 PM	**Compliance:** Ernie Conrad, PE Consulting Engineer 90.1 ECB Committee

The Philadelphia Chapter of ASHRAE is offering a comprehensive, in-depth and unique two-day program covering ANSI / ASHRAE / IES Standard 90.1 (2016) Energy Standard for Buildings (except Low-Rise Residential Buildings). This is the mandatory energy code in New Jersey, an option in Philadelphia and Maryland, and an expansion of the optional energy code in the rest of Pennsylvania. A program of this magnitude and depth is not available anywhere else and at this low a cost. Registration is open to everyone interested, and especially members of AIA, IES, IALD, USGBC, and CSI. **All presenters are the people who write and enforce the 90.1 Standard.**

Location:

Burns Engineering, Training Room
Two Commerce Square
2001 Market Street, Suite 600
Philadelphia PA 19103

Cost:

$100 Chapter Member and Code Official
$135 Society Member
$200 Reciprocal Society Member
(AIA, IES, IALD, USGBC & CSI only Information required)
$250 Guest

Registration fee includes both days and handouts. A continental breakfast, lunch, snacks and refreshments will be provided each day.

Standard 90.1 & 90.1 Users Manual for are available for purchase:

$90 Chapter Member or Code Official - Standard 90.1 (2013/2016/2019)
$110 Chapter Member or Code Official - 90.1 User Manual (2013/2016)
$110 ASHRAE Society Member - Standard 90.1 (2013/2016/2019)
$125 ASHRAE Society Member - 90.1 User Manual (2013/2016)
$120 Guest - Standard 90.1 (2013/2016/2019)
$130 Guest - 90.1 User Manual (2013/2016)

Available at a drastically reduced price (without shipping) when paid in advance with the seminar registration. Ordinarily, these books sell to non-ASHRAE members for $177+shipping, and to members for $133+shipping.

Register: https://ashraephilly.org/meetinginfo.php?id=104&ts=1583026970

Remote Participation (Online): Register for the seminar and then email c021mem@ashrae.net for the link and meeting details.

Public Transportation: *SEPTA Suburban Staton (3 blocks), AMTRAK 30th St Station (5 blocks)*
Nearby Hotels: *Sonesta, Soffel, The Westin, Holiday Inn Midtown, etc.*
Parking: *Burns discounted parking ($13) at the William Penn House garage, 36 S.19th St.*

PHILADELPHIA CHAPTER PROGRAMS CALENDAR 2020-2021

All meetings through December will be virtual. More details to follow!



Government Activities Update

Pennsylvania Proposes SB 1295, ASHRAE 188 (Legionella) Standard:

> The Pennsylvania Senate will vote on SB 1295 requiring certain facilities to adhere to ASHRAE 188-2018, call your senator to voice your opinion on the matter. Legionnaire's is a severe pneumonia caused by breathing in small droplets of water in the air that contain the legionella bacteria. In the United States there are 10-15 cases per million population annually, with 10% of cases being fatal. ASHRAE 188 provides legionella risk management requirements for the design, construction, commissioning, operation, maintenance, repair, replacement and expansion of new and existing buildings and their associated potable and nonpotable water systems and components.

Click here to read the entire standard.

Anthony Scaccia, PE (DE), LEED AP BD+C
Government Activities Chair
c021ggac@ashrae.net

ASHRAE Philadelphia Chapter Digital Directory

Our 2020-2021 Chapter Digital Directory is now complete.

This digital version is replacing the paper versions from years past. This provides flexibility during these challenging times, having access anywhere. It's easy to use, highly interactive, and always up to date. We hope you enjoy this refreshed publication.

The link to the directory is on our home page on the website, or you may click here to advertise or purchase access to the directory!

CTTC Article

COVID-19 has been the greatest global shock in decades. Hundreds of thousands of lives have been lost, and societies need to protect themselves, and to recover, as quickly as possible. As an airborne infectious disease it is more important than ever to ensure that the spread of this airborne infection disease and any future ones be taken in to consideration in the design of heating, ventilation, and air-conditioning (HVAC) systems in buildings. HVAC professionals play an important role in protecting building occupants by interrupting the indoor dissemination of infectious aerosols with HVAC and local exhaust ventilation (LEV) systems. The risk of pathogen spread, and therefore the number of people exposed, can be affected both positively and negatively by the airflow patterns in a space and by HVAC) and local exhaust ventilation LEV systems. ASHRAE is the global leader and foremost source of technical and educational information on the design, installation, operation and maintenance of these systems. The pandemic has encouraged ASHRAE now more than ever to support research that advances the knowledge base of indoor air-management strategies aimed to reduce occupant exposure to infectious aerosols.

This position document provides recommendations on the design, installation, and operation of heating, ventilating, and air-conditioning (HVAC) systems, including air-cleaning, and local exhaust ventilation (LEV) systems, to decrease the risk of infection transmission. Also non-HVAC control strategies to decrease disease risk and to support facilities management for both everyday operation and emergencies are covered in this document.

Click here to read the document.



Thank you Michael Calabrese!

The Philadelphia Chapter Board of Governors finally had a chance to get together (while practicing social distancing protocols) to recognize Michael Calabrese for the stewardship he provided for our chapter as President for 2019-2020. Thanks for all of your continued hard work Mike!

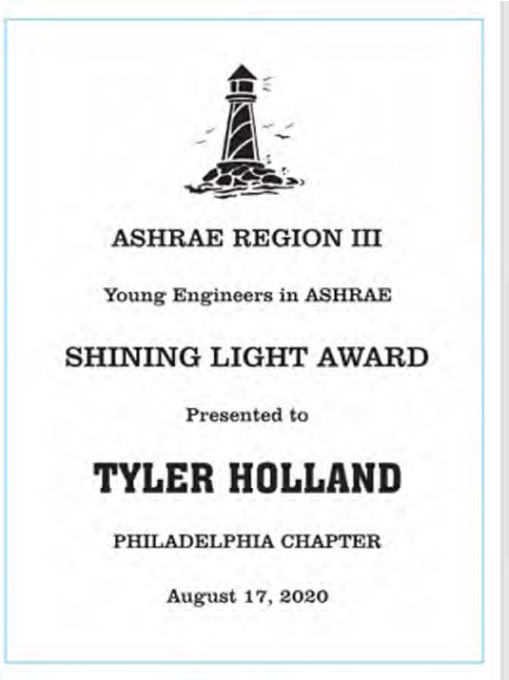
Congratulations to These Philadelphia Chapter Award Recipients!

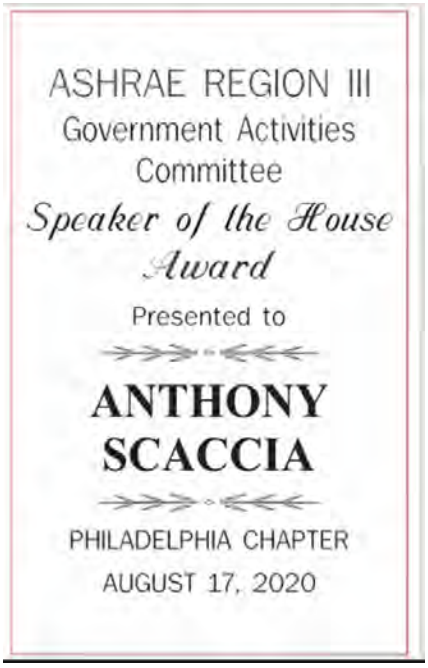
At the Virtual ASHRAE Region III Chapter Regional Conference (CRC) held in September, several Philadelphia Chapter leaders received honors for their contributions and achievements.

1st Place for…
Membership- Top Gun Award
YEA- Shining Light Award
Government Affairs- Speaker of the House Award
Leadership- ACE Award

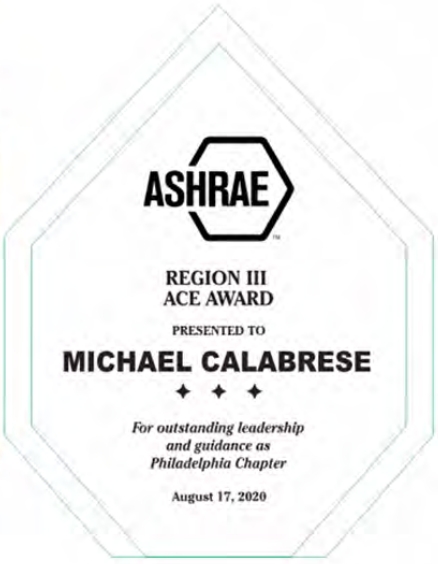
Congratulations and thank you for your service!





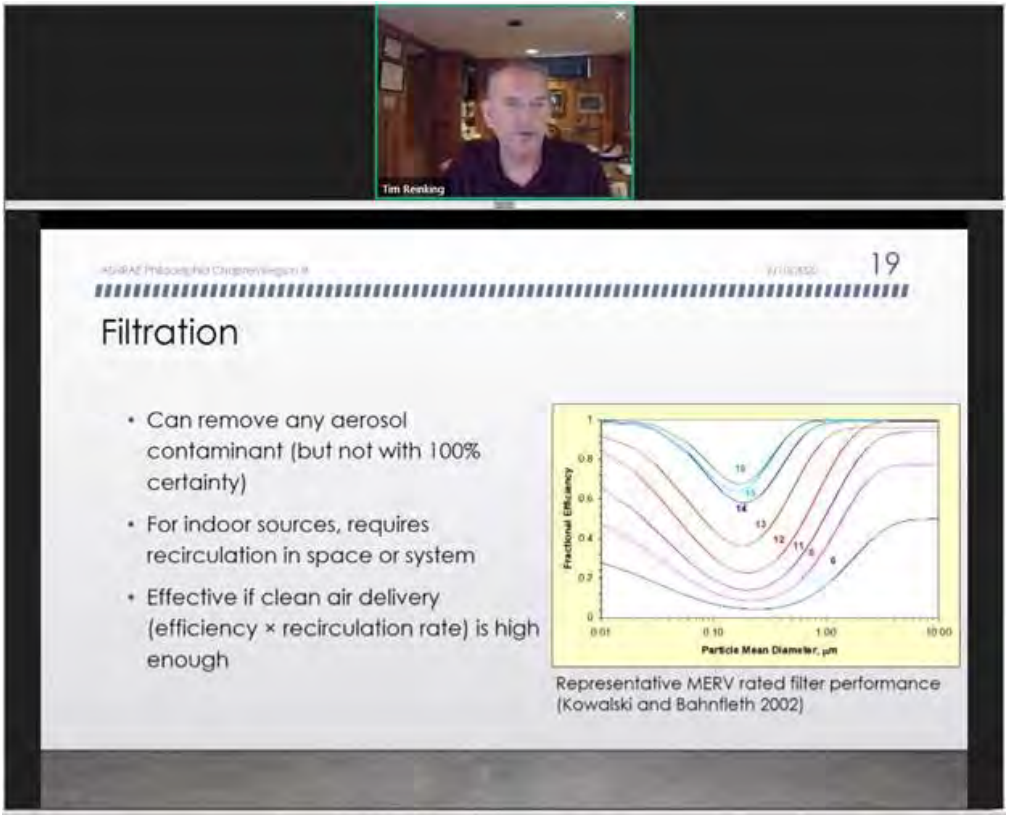






September Virtual Meeting

"Managing HVAC Systems to Reduce Infectious Disease Transmission"
presented by
William P. Bahnfleth, PhD, PE, FASHRAE, FASME, FISIAQ



Don't miss October's Virtual Meeting!
See page 1 and page 4 for more information!

The Philadelphia Future City Competition will be virtual on January 30, 2021.

The 2020—2021 Future City Theme is ***Living on the Moon***.

At night, surrounded by stars or clouds, the Moon looks distant and lifeless. However, it holds a place of unique beauty and dominance in the sky and has been inspiring humanity for eons. Dreamers of all kinds—artists, science fiction writers, scientists, engineers—have imagined a thriving city on the Moon, one with healthy people and a resourceful, sustainable ecosystem. New ideas are constantly being dreamed up and tested.

The Competition Challenge:
Design a future lunar city and provide examples of how your city uses two Moon resources to keep your citizens safe and healthy.

For more information, to volunteer, to sponsor, or to register, go to https://futurecityphilly.org/

Questions? Contact the Regional Coordinator, Jennifer Wetzel: coordinator@futurecityphilly.org , (215) 573-3935



2021 ASHRAE Winter Conference & AHR Expo

Chicago, IL
January 23–27, 2021

Click here

for the latest information!

Dear ASHRAE Members,

I hope this continues to find you safe and well.

As you know, volunteers and staff are working together to ensure the safety of our HVAC&R community as we plan for the 2021 AHR Expo. After careful consideration, the 2021 AHR Expo will be **officially postponed** from its originally scheduled dates of January 25-27, 2021 in Chicago, Illinois.

Both McCormick Place, the venue for the exposition, and Choose Chicago, an organization dedicated to bringing visitors to Chicago recognize how vital the AHR Expo is to the city of Chicago and the HVAC&R industry. March 15-17, 2021 continues to be considered as a potential date to host the show. In a survey conducted by AHR Expo, the proposed move to March is preferred by nearly 80% of exhibitors.

ASHRAE, AHRI and AHR Expo show management will make the final determination and announcement on whether to conduct the AHR Expo March 15-17, by October 15, 2020. This will provide a six-month window for both exhibitors and attendees to adequately plan.

Society is currently studying options for hosting the **2021 ASHRAE Winter Conference** and meetings, and will announce plans once the final status of the AHR Expo is known. We will keep you informed as these options are explored.

I continue to welcome your comments regarding the 2021 ASHRAE Winter Conference and AHR Expo directly to **ashraepresident@ashrae.org**.

Stay healthy,

Charles E. Gulledge III, P.E., Fellow ASHRAE
2020-21 ASHRAE President

The Philadelphia Chapter
of the
American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

994 Old Eagle School Road
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Visit
our web site at:

www.ashraephilly.org

Follow us
on LinkedIn

Republication of material contained herein is expressly forbidden without official Chapter authorization. The Chapter does not speak or act for the Society. Any member with material to submit for inclusion in the *Climate* can send the information to:

Hope Silverman
P 610-971-2169
hope@mmco1.com

Material can include letters to the editor, member news, upcoming events, comments on chapter programs or issues, etc.

New Philadelphia Chapter Members

Andrew Gallagher
Ravindra Pradhan
Christopher Garrity

What are the benefits of paying Philadelphia Chapter dues* ?

Discounts:

$200 Discount for Basic Class
$150 Discount for 90.1 Seminar
Free access to the Digital Directory
And much more!

* Note that Philadelphia Chapter Membership Dues are $35/year.

To receive discounts, please remit you Chapter dues when renewing online or applying for a new membership. Feel free to upgrade online by clicking here or contact c021@ashrae.net for assistance.

Membership Advancement

If you are currently an ASHRAE Associate Member, becoming a full Member is easier than you think! The following count toward the required **12 points** to advance to full membership status. You must update your ASHRAE online biography and send an email to membership@ashrae.org to advance.

Non-accredited degree = 4 points
PE = 4 points
Accredited degree = 6 points
Industry experience = 1 point/year

ASHRAE – PHILADELPHIA CHAPTER

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND
AIR-CONDITIONING ENGINEERS, INC. PHILADELPHIA CHAPTER

BASIC HVAC SYSTEM DESIGN COURSE

ON-LINE FORMAT STARTING IN FALL 2020

Classes will meet Tuesdays and Thursdays from 6:15 PM to 8:30 PM beginning in October and continuing until the middle of March.

All classes in October, November, and December will be provided in a **virtual format**. Classes will remain on-line until further notice. Students are responsible for their own devices and internet connection.

If in-person instruction can resume at some point in 2021, classes would be held in Center City Philadelphia. Students would be responsible for transportation and parking costs.

This is a demanding one-year course that introduces students to the fundamentals of HVAC design.

2020-2021 Course Subjects Include:

Fundamentals and Psychrometrics
Load and Heat Transfer Fundamentals
Load Calculations
Pumps, Piping & Piping Systems
Basic Steam & Boilers
Fans, Air Distribution & Duct Design
Refrigeration
Controls & Instrumentation
Equipment Selection

The class is a great way to further, or even begin, a career in HVAC.

The Basic Class tuition is $1,200 ($1,000 for ASHRAE Members who have paid both their National and Philadelphia Chapter dues). Tuition includes all course materials.

Class size is limited to 30 students. To enroll, complete and submit the application including a **non-refundable** deposit of $200 payable to "Philadelphia Chapter ASHRAE". Balance due at first course session.

If you would like to enroll or receive further information, please contact:

Hope Silverman
Philadelphia Chapter ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
Phone 610-971-2169
Fax 610-971-4859
E-mail: hope@mmco1.com
Web site: www.ashraephilly.org

Philadelphia Chapter ASHRAE

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

Basic HVAC System Design Course Application

2020-2021

Personal Information

Name: _____
Last First Middle Initial

Home Address: _____
Street City State Zip

Phone No.: _____ Application Date: _____

Email: _____

Current or Most Recent Employment

Employer: _____ From: _____ To: _____ Total _____
Firm Name Date Date Years

Business Address: _____
Street City State Zip

Job Title: _____ Phone: _____ Fax: _____

Email: _____

Discipline: ____ Engineer ____ CAD/Designer ____ CAD/Drafting ____ Sales Rep ____ Trades ____ Administration

Learning Goals

Please describe what you hope to learn and take away from this class.

_____

_____

_____

Education

	School (Name & Location)	Years Attended	Major	Degree Or Diploma
High School				
College				
Other				

PLEASE SEE REVERSE SIDE FOR PAYMENT

PAYMENT

AMOUNT:

Members: _____ $200 Deposit _____ $800 Balance Due _____ $1,000 Total Fee
Members are those who have paid their ASHRAE National and Philadelphia Chapter Dues

Non-Members: _____ $200 Deposit _____ $1,000 Balance Due _____ $1,200 Total Fee

The balance due must be received by our office prior to the first evening of class.

PAYMENT BY CHECK: _____ (made payable to "Philadelphia Chapter ASHRAE")

PAYMENT BY CREDIT CARD: ____ VISA ____ Master Card ____ American Express

Total Amount to be Billed to Card: _____

Credit Card Number: _____

Expiration Date: _____

Name on Card (please print): _____

Billing Address for Card: _____

_____

_____

RETURN THIS FORM WITH PAYMENT TO:

Hope Silverman
Philadelphia Chapter ASHRAE
994 Old Eagle School Road
Suite 1019
Wayne, PA 19087-1866
Phone 610-971-2169
Fax 610-971-4859
hope@mmco1.com

For Official Use Only

Date Received: _____ Tuition: _____ Deposit: _____ Check No.: _____ Balance _____