

Northeast Chapter

Thermal Briefs

OCTOBER 2017

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Presidential Welcome

A new calendar year for ASHRAE has begun! Speaking on behalf of the Chapter, I'd like to thank David Houle for his stellar leadership last year. We had a good year under his watch and I hope to continue with his forward momentum.

One of the accomplishments from last year was the updating of our website. That work will continue, as well as other gradual changes throughout the year. Expect to see a transition away from the Google Group mailing list as the website continues to develop and mature. In fact, feel free to create a new account on the website, as that will be the way to hear about the latest happenings and newsletters. Oh, and we have a Twitter Account now: https://twitter.com/NortheastASHRAE August and September were action-packed, featuring the Chapter Regional Conference (CRC) and our annual golf outing. The CRC took place August 17-19, the other major event, our golf outing, took place September 15: if you attended and took pictures, feel free to forward them to us so we can post them on the website!

Of course, none of these events or achievements would be possible without those who selflessly volunteer their time in various roles. I'd like to introduce you to this year's Chapter Officers and Chairs:

Kendra Potasiewicz Kevin Houghtaling Ramy Girgis

Ramy Girgis
Joe D'Aprile

Marianne Schumacher Liesl Hammer Raymond Hickey

David Ricci Doug Belokopitsky

Stanley Westhoff Todd Turcotte

Todd Turcotte David Houle Brian McLean John Thomas

Russ Danforth

- President Elect, Chapter Transfer Technology Chair, Program Chair

Vice President, Newsletter EditorTreasurerSecretary

Research Promotion ChairMembership Promotion ChairRefrigeration Chair

Student Activities Chair
 Grassroots Government Activities Chair

Grassroots Government Activities Cl
 Historian

- Webmaster, Electronic Communications Chair, Board of Governors

Board of GovernorsBoard of GovernorsBoard of GovernorsBoard of Governors

If you're interested in serving, we're currently looking for a YEA Chair and Honors and Awards Chair. Please contact me (adam.feather@trane.com) if you're interested.

Thank you and stay safe! Adam Feather 2017-2018 President Northeast Chapter



2017 Meetings

September

In September, The ASHRAE Northeast Chapter held our annual Golf Outing and Steak Roast on Friday September 15th at Airway Meadows Golf Course. We would like to thank everyone who came out for Golf and/or Dinner and made the event an excellent time for all! An extra special Thank You those whom made contributions to ASHRAE through Tee Flag purchases, all whom donated prizes to be raffled, and everyone whom participated in the prize and 50/50 raffles!

Stay tuned to Next Month's Newsletter for More details from the Golf Outing!

October

October 17th is ASHRAE Northeast Chapter's first Chapter lunch meeting of the year at the Italian American Community Center, in Albany. The meeting has been approved for 1PDH! A synopsis of this month's meeting can be found on pages 17-19 of this newsletter.

Save the Dates

Tuesday, November 14th—Meeting at the Italian American Community Center

Tuesday, December 12th—Meeting at the Italian American Community Center



Message from the President

October 2017 President's Message

Greetings!

It seemed that everyone had a blast at our Annual Golf Outing this year! Turnout was high and the weather was great — we have pictures posted on the new website, for all to enjoy (you did make an account, right?). If you have pictures you'd like to share with the group, send them our way and we'll upload them. I'd personally like to extend my gratitude towards Kendra Potasiewicz, Ramy Girgis, Marianne Schumacher, and Kevin Houghtaling for all of the hard work they invested in the event.

I'd also like to thank our Tee Flag donors, whose support is greatly appreciated:

Technology Plus	Trojan Energy Systems
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NorthEast HVAC Solutions	Johnson Controls
DED 1	F (II (' 10 1'
RF Peck	Eastern Heating and Cooling
LJ Early	Thermal Environment Sales
	Thermal Environment Sales
Victaulic	Quantum Engineering
Fusion Systems Engineering	FPI Mechanical
The Trane Company	Advanced Comfort Systems
The Trane Company	Advanced Connort Systems
LaBella Associates	Technical Building Solutions
	-
Pasco BAS	Tech Valley Engineering
MED Comment Committee LLC	A A ' . E'14
MEP Support Services LLC	American Air Filter
Emerson Swan	
Emerson Sman	

As mentioned above, pictures will be posted on the new website. I recommend creating an account at your earliest opportunity, as it will soon become the only source to receive our newsletters and other updates: http://www.ashraenortheast.org/

Members 35 and under: keep your eyes peeled for a survey. We're interested in hearing your thoughts regarding the chapter and would greatly appreciate if you could spare 3-5 minutes of your time. Stay tuned!

If you're interested in serving in some capacity of ASHRAE leadership, we're currently looking for a YEA Chair, Membership Promotion Chair, and Honors and Awards Chair. Please contact me (adam.feather@trane.com) if you're interested.

Thank you and stay safe! Adam Feather 2017-2018 President Northeast Chapter



Message from Membership Promotion

Welcome back to another year of ASHRAE!

In preparation for this year's Roster, we ask all members to double check your data listed in the latest Roster, and the information online in your bio at ASHRAE.org. Please make corrections to the online bio and if the Roster is showing outdated information, please send an email with the subject line

"ASHRAE NE CHAPTER ROSTER 2018 CORRECTION" to Liesl. Hammer@gmail.com.

For those who are new to ASHRAE, all of the officer and chair positions are run by volunteers. *We currently have open positions* and need more help running the Chapter, it doesn't happen automatically! Fresh perspectives and ideas help fuel the Chapter, so please consider getting involved. If you're willing, contact Adam Feather, or any of the Chapter's Officers.

OCTOBER IS MEMBERSHIP PROMOTION MONTH!

Bring a non-member colleague to the October ASHRAE Meeting to introduce them to our Chapter and you both get in for the price for one!

Additionally, for all members, pick up an *Introduce a Friend to ASHRAE* coupon for any future ASHRAE meeting during the upcoming year, and your meal's on us when you introduce someone to our great organization!



Our New and Returning Members:

Mr Kevin Arthur Mitchell
Mr Jeffrey W Burt
Mr Seth A Travaly
Mr Bruce A Wollaber, PE CGD
Miss Jessica A OBrien

Sage Engineering Associates
Franklin Energy Services
KW Mission Critical Engineering
Comfort Engineered Systems
Technical Building Services

Miss Jessica A OBrien Technical Building Services
Mr Joseph G Higgins Siemens Industry, Inc. Building Technologies Divi-

sion
Mr Kevin Tucker
M+W Group

Make sure you give a warm Welcome to our New Members when you meet them!

Finally, if you need help at any time of the year, or have questions regarding membership, please don't hesitate to contact me at Liesl.Hammer@gmail.com

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Special History Report

Northeast Chapter History Report - Long Island Chapter CRC 2017

The Long Island Chapter hosted the Chapters Regional Conference (CRC) in Hauppauge, NY on August 17-19.

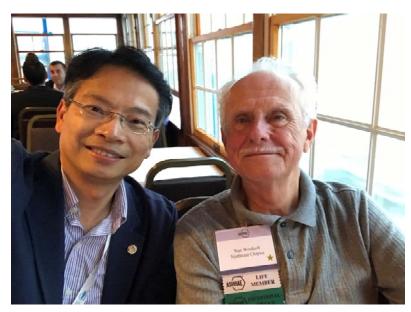
The following awards and certificates were presented:

- J. David Houle received the Presidential Award of Excellence (PAOE) with Special Citation
- Rich Vehlow received a Certificate of Appreciation for RVC of GGAC
- Stan Westhoff received a History Gold Ribbon for the history of J. David Houle
- Liesl Hammer received the Thomas S. Brown Membership Award and First Place in Membership Growth Award
- Dave Ricci received the "Top Dog" Award & Most Improved Chapter for Student Activities

Look for information as it becomes available for the Chapter History meeting in December.

Submitted by Chapter Historian,

Stan Westhoff



Stan (right) and Edward Tsui (left) VP ASHRAE

Sheila Hayter, the Society President Elect, presenting at the CRC





Northeast Chapter Officers and Board of Governors 2017-18

Adam Feather - Chapter President

Kendra Potasiewicz - President Elect, Chapter Transfer Technology Chair, Program Chair

Kevin Houghtaling - Vice President, Newsletter Editor

Ramy Girgis - Treasurer Joe D'Aprile - Secretary

Marianne Schumacher - Research Promotion Chair Liesl Hammer - Membership Promotion Chair

Raymond Hickey - Refrigeration Chair
David Ricci - Student Activities Chair

Doug Belokopitsky - Grassroots Government Activities Chair

Stanley Westhoff - Historian

Todd Turcotte - Webmaster, Electronic Communications Chair, Board of Governors

David Houle - Board of Governors
Brian McLean - Board of Governors
John Thomas - Board of Governors
Russ Danforth - Board of Governors

Please consider volunteering for a regional or society level position or let us know if you think of anybody who would be good for any of the positions listed at the following link:

https://www.ashrae.org/society-groups/committees/

If you have a professional relationship with any local government officials, please let us know!

The ASHRAE Northeast Chapter would like to reach out to them to promote sustainability topics. Government officials might include school board, state or provincial legislative committee, state or provincial agency, city council, county board, etc.

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Policy Alert for HVAC&R Businesses

RECENT CHANGES TO NEW YORK EMPLOYMENT LAW THAT IMPACT YOUR BUSINESS

In the past several years, the State of New York has passed numerous laws affecting employee relations and benefits and imposing additional burdens on employers. Heating and cooling businesses must comply with these laws or face significant potential liability. While one article cannot solely provide an employer enough education to limit their exposure, understanding the most recent changes is an important starting point.

New York State Law

Wage Increases. Over the next 5 to 7 years, minimum wage in New York State will dramatically increase. Depending on the location and size of the employer, minimum wage will increase from \$9 per hour to \$15 per hour between 2016 and 2023. For more information, see New York State's Minimum Wage chart.

Overtime and Exemption Status. New York State has gradually increased the threshold salary for an employee to qualify as "exempt" from overtime compensation. Previously, if an employee did not earn \$35,000 per year they automatically qualified for overtime compensation. That figure will rise to as much as \$56,000 per year in 2021. Notably, even if the employee is paid this wage, they may still qualify as a non-exempt employee, if their duties do not fall within an executive, administrative, professional, computer specialist or outside sales exemption.

Paid Leave. Effective January 1, 2018, employees in New York State can get paid leave for the birth of a child or serious medical condition of a family member. The law provides 8 weeks of paid time in 2018, 10 weeks in 2019 and 2020 and 12 weeks thereafter. Employees will receive a designated portion of their weekly wages capped at 50% of the average weekly state wage, which is presently \$652.96. The paid leave is funded by employees through the employer's insurance.

New York City Laws Applicable to Employers Outside the City

Employers should be aware of several New York City laws which can apply to businesses located outside the City because they have employees working in New York City. These include new rules regarding <u>paid sick time</u>, <u>background checks for new hires</u>, <u>protection for freelance workers</u>, and a <u>ban on salary history questions</u>.

These are but a few examples of the ever changing landscape of New York's employment laws. Employers need to know and understand all these laws to avoid huge financial risk.

Jeffrey S. Ettenger, Esq. is a partner at <u>Schwartz Ettenger PLLC</u> where he concentrates his practice in the area of labor and employment law, assisting employers with their day-to-day employment needs, as well as all areas of employment litigation.

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2017 ASHRAE Online Courses

2017 Online Course Series

REGISTRATION

One-part course (3 hours): \$284 (\$219 ASHRAE Member)

Two-part courses (6 hours): \$484 (\$359 ASHRAE Member)

Register

MULTIPLE PARTICIPANTS

Site Licenses are Available when five or more attend. Learn More >>_

TIME FRAME

All courses are presented from 1:00 - 4:00 PM, Eastern Time.

General Information

Information about the ASHRAE online course series. Learn More >>

Note: Course fees listed above are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

All courses are archived for a period of time after their initial presentation.

Receive a 10% discount on the PDF format of the Recommended Reference. (Discount is included in item prices on registration form.)

Two-Part Half-Day Short Course List

The following course carries 6 PDH credits and is comprised of two parts.

Registrants must attend both parts in order to receive CEU/PDH credits. Archiving is available.

Note: Course fees listed are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

Nov 1, 2017

New! Complying with Standard 90.1-2016, Parts I and II, ES Practices

The 2016 update of ASHRAE Standard 90.1 Energy Standard for Buildings is a major revision, containing more than 125 changes from the 2013 version. Together, Standards 90.1-2007, 90.1-2010, 90.1-2013 and 90.1-2016 produce almost 40% energy savings from the 2004 version. The 2016 edition offers a si...



2017 ASHRAE Online Courses continued

Half-Day Short Course List

The following courses each carry 3 PDH credits. Archiving is available.

Note: Course fees listed are per person for a single presentation connection for individual use and may not be shared with other users. All registrants must individually register for the desired course to participate and receive continuing education credit.

Nov 29, 2017

NEW! Variable Refrigerant Flow System: Design & Application

Variable-refrigerant flow (VRF) systems are now becoming increasingly utilized across North America. This course provides nonmanufacturer-specific concepts of the unique operational characteristics of VRF systems and how to apply VRF systems to a wide range of building types. The course supplements...

Dec 5, 2017

NEW! New ASHRAE-Classified Refrigerants to Meet Society's Changing Needs

ASHRAE Standard 34 maintains a list of refrigerants with a standardized system of assigned refrigerant numbers and well defined safety classifications, including toxicity and flammability ratings. This ever growing list of refrigerants currently includes 161 chemicals and chemical blends that have...



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ASHRAE NORTHEAST CHAPTER SCHOLARSHIP APPLICATION



Middle

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

The ASHRAE Northeast Chapter Scholarship Program is designed to encourage and assist in the education of men and women pursuing a career in the field of heating, ventilating, air conditioning and refrigeration (HVAC&R) through its granting of scholarships. The program also serves the public interest by aiding in the education of men and women to become qualified to practice within the HVAC&R field.

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Name & Relation		Address		Phone		
Name & Relation		Address		Phone		
Please list a	ny associations with ASH		heast chapter members.			
Name & Relation		Address		Phone		

Basic Criteria which all Scholarships are granted:

- Full time enrollment in a college, university, or technical institute.
 Undergraduate students should be entering their sophomore, junior or senior year with at least one full year of studies remaining in the year for which the scholarship is granted. Graduate students can apply at any point during their studies as long as they have at least one full year of studies remaining in the year for which the scholarship is granted.
- Study that is applicable to service in the HVAC&R profession.
- A cumulative grade point average (GPA) of at least 3.0 on a scale where 4.0 is the highest (attach official transcript).
- Association with the region covered by ASHRAE Northeast Chapter (Capital Region) by attendance to a school in the area or permanent address in the area.

I believe all of the above information to be true and complete and I hereby apply to the American Society of Heating Refrigeration and Air-Conditioning Engineers –Northeast Chapter for an ASHRAE Scholarship. I certify that I am not receiving full funding for my education from an employer, any branch of the Armed Services or any other organization.

APPLICATIONS MUST BE POSTMARKED BY Thursday, March 30th, 2018:

Mail or email completed application to: Dave Ricci

Johnson Controls Inc. 116 Railroad Ave. Albany, NY 12205 518-451-2708 David.e.ricci@jci.com



3



Employment Opportunities

We are currently accepting employment opportunity advertisements for this year's newsletters. We have revised our cost for these postings. Rather than a set 'price' there is no cost, but we do highly encourage and appreciate any and all donations to RP, to aid in reaching our RP fundraising goal. Again, the newsletter is distributed to OVER 200 RECIPIENTS each month!

Interested in placing an ad? Please contact me at ashrae.ne.vp@gmail.com.

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Business Card Ads

The ASHRAE Northeast Chapter would like to thank the following sponsors for choosing to help us by making a donation to ASHRAE Research Promotion:



We are currently accepting business card advertisements for this year's newsletters. The cost of a business card ad is \$10.00 per month (this money goes directly to Research Promotion; it is not income for our chapter operations).

If you list an ad, your ad will circulate to OVER 200 RECIPIENTS each month!

Interested in placing an ad?
Please contact me at ashrae.ne.vp@gmail.com.



Instructions to Sign Up for our New Website for ASHRAE Northeast Chapter

Step 1:

Go to http://www.ashraenortheast.org/

Step 2:

Click "Login"



Step 3:

Click "Sign up"





Step 4:

Fill out the form and click the "Sign up" button. Make sure that the Subscribe to Thermal Briefs box is checked to stay informed with our monthly newsletters.

Join us!

Welcome to our community -	tell us about yourself and sign up
★ Required field ® Field vi	sible on your profile 40 Field not visible on profile
Username	★ ③
Email	★ ��
Password	Your password will be sent to the above e-mail address. Once you have received your new password you can log in and change it.
First Name	★ ③
Last Name	★ ③
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City	★ ●
State	**
Zip Code	★ ③
Phone #	★ �
Subscription	▼Thermal Briefs - ASHRAE Northeast Newsletter
	Sign up
Thanks for visiting our site! H	ope you enjoy your stay!





Gambling with Deferred Maintenance: Today's Solution, Tomorrow's Problem

The business landscape is becoming increasingly complex and competitive, and many companies are operating on a razor-thin edge.

In a push to succeed, organizations and business leaders are constantly looking for ways to streamline, reduce waste, and run as lean as possible. In other words, they're trying to do more with less—keeping costs down by balancing maintenance budgets, optimizing labor schedules, and integrating processes.

As a Facility Manager, you control and oversee your building's critical operations, so you understand today's business pressures as much as anyone in your organization. The upkeep of equipment and systems can have you running in all directions, all around the clock. Managing occupant complaints and expectations adds to the demands you face.

If you're working in an environment with budget and time constraints, your organization may have defaulted into a deferred maintenance scenario, which can create job backlogs. In this case, you're probably reacting to issues, rather than preventing them.

The top challenge for Facility Managers is that they simply do not have enough time to get all of their work done.¹

- 55% of Facility Managers fall into reactive management.² Reactive methods mean you can lose at least 11% of every day—at least 228 hours every year!³
- 49% of Facility Managers spend 2 to 4 hours per day dealing with occupant complaints. Of those surveyed, 16% say they spend more than four hours per day doing this.⁴

More Pressure on Facility Managers

By definition, deferring maintenance is the practice of postponing system checks, repairs, and upgrades to a later budget cycle due to a lack of time, money, or both. The idea is to minimize the investment into existing systems and personnel to improve cash flow and reduce expenses. In other words, spend less get more.

Deferring maintenance can deliver more, but not always in the ways you want. Instead, it can lead to:

- More unplanned expenses Failure to replace worn or malfunctioning system components can lead to costly system breakdowns, and even facility shutdowns.
 - If you defer maintenance, you can expect future expenses to be equal to or greater than the cost of the part squared, or 15 times the total repair cost.
- More safety risks Operating under a reactive mode can mean more safety liability, and that can lead to an increase in insurance claims.
 - Insurance claims can rise by up to 71% when facility teams are operating in a reactive manner, and each claim is 11% more expensive.

55% of Facility Managers fall into reactive management

228 hours every year!



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- More system downtime Should repairs become necessary, you may have to wait for parts to be produced and shipped.
- More production bottlenecks Without ongoing system maintenance, it can be difficult to keep equipment operating at peak performance.
- More missed profit opportunities Energy and sustainability goals can fall by the wayside whenever preventive maintenance activities are delayed or halted.

The cost of waiting to maintain equipment could potentially be 30 times higher than the early intervention cost.⁵

Why Ongoing Maintenance of HVAC Systems Is Critical

Half of a facility's energy costs are attributed to heating, cooling, and moving air.⁷ When HVAC systems are not maintained on time or as planned, they do not perform as they should. Air handler blower fans and other components may begin to short cycle and wear themselves out. The more that components turn on and off and on again, the more energy you waste, and the more likely it is that you'll be dealing with spikes in energy costs.

Energy costs up to 81% with deferred maintenance issues



Proper filter maintenance is essential to keeping HVAC systems operating effectively and efficiently. Compared to components like motors and compressors, filter selection and maintenance may seem simple, but there are multiple facets of the filter and the system it's installed in that must be taken into consideration. These considerations include system airspeed, fan efficiency, filter resistance, service life, efficiency, and cost. Filters are essential to your HVAC system's performance and can extend the life of the system components, decrease your energy spend, and reduce the labor burden of your team, saving you time and money.

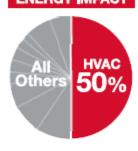
Impacts of Filters on HVAC costs

 15% to 40% of the lifetime ownership cost of an air handler unit is directly attributable to the air filters selected.⁸

Impacts of Filters on HVAC efficiency

- · Only 0.006" of surface debris can result in a 16% efficiency loss for HVAC coils.
- Up to 37% more energy is consumed by AHUs with dirty coils vs. clean coils.

ENERGY IMPACT





Each \$1 avoided by deferred maintenance creates \$4 in future expense⁶









Overlooking Air Filters Is a Costly Mistake

Filters can play an important role in reducing your deferred maintenance backlog, so having an optimized program for filter maintenance and replacement is vital to a facility's operations. The time spent on filters and related maintenance, such as purchasing, inventory, staging, removal, and installation, is highly labor intensive.

- 20 to 25 labor hours are required to replace 100 bag/box filters.
- 10 to 15 labor hours are required to replace 100 pleated filters.
- One labor week for each set of filters equals \$96,153 in deferred maintenance.

By failing to look at ways to analyze and improve processes, reactive Facility Managers put themselves at risk. Short-term solutions and price-driven shortcuts may be perceived as problem solving, but in reality they end up costing companies more. The annual facility cost of deferred maintenance is \$5 million. 36% of companies say that number is even higher.

Instead of reacting to HVAC issues in your facility, you can put in place a preventative maintenance strategy to help you minimize the time and cost involved in maintaining optimal indoor air quality.

Now's the Time to Be Proactive

When working with a tight budget and limited resources, it can be challenging to convince executives to allocate investment to HVAC maintenance and filter replacement.

The first step in optimizing your clean air spending is to work through a total cost of ownership (TCO) analysis. A locally optimized filtration analysis will provide the highest level of air filtration solutions, while also minimizing your total life cycle costs. This is where an application and data analysis specialist can take a true consultative and technical approach to understanding your complete air filtration needs, application, and business goals in order to optimize your performance and lower your TCO.

Using advanced diagnostics software, this specialist can act as a partner, providing the insights needed to help you identify a filtration solution that can reduce operational time and costs while increasing energy savings.

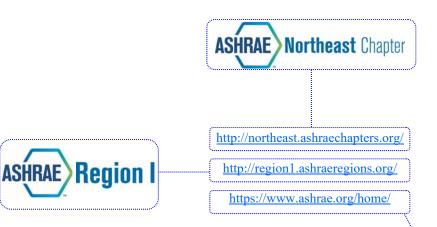
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- Deferred Maintenance: Survey Says Managers Confident About Overcoming Backlog, Facility Net, 2015
- 3. The 2015 Core Facility Benchmarking Study, iLab Solutions, 2015
- How Facility Managers Can Handle Occupant Complaints, Facilities Net, 2014
- 5. Paying for Deferred Maintenance, Buildings.com, June 2006
- Research by Rick Biedenweg, President of Pacific Partners Consulting Group and former Assistant Vice President of information resources of Stanford University, as reported by school/dude.com.
- 7. Department of Energy, 2006 Buildings Energy Data Book
- Study by the Energy Systems Lab at Texas A&M University, as reported by the Air Conditioning, Heating and Refrigeration News in "The High Cost of Deferred Maintenance." December 2008

Contact your AAF representative for a diagnostic evaluation that can help you identify an optimal filtration solution. Click here to start saving time and money.



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





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