# This is ASHRAE



- ASHRAE Overview
- Standards
- Research
- Publications
- Education/Certification
- Student Members/Associate Members/Young Engineers in ASHRAE
- ASHRAE Conferences







# **ASHRAE** Overview

### Who We Are

- Founded in 1894
- 54,000+ volunteer members in over 130 countries
  - 5,000+ student members
  - 14 regions
  - 179 chapters
  - 312 student branches

### Who We Are

- Industry Classification
  - Consulting engineers
  - Contractors
  - Manufacturers
  - Manufacturing representatives
  - Government, health and education
  - Design build
  - Architects
- U.S./Canada (43,000+)
- Global (10,000+)





### What We Do

- Serve as pipeline for technical information to members, chapters and companies
- Create standards and technical guidelines to serve built environment
- Offer continuing education for industry professionals
- Serve as networking tool for industry professionals

### How We Do It

- 27 standing committees
- 130 standards and guidelines committees
- 100+ technical committees
- 300+ publications
- Six certification programs
- 100+ educational courses
- Research



# What Makes Us Different

- A global membership
- Members create our built environment technologies
- Largest publishing program in field
- One of few HVAC&R organizations in world with its own research program



### **ASHRAE Mission**

 To advance the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world.

### **ASHRAE** Vision

 ASHRAE will be the global leader, the foremost source of technical and educational information, and the primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.





## **ASHRAE Core Values**

### • Excellence

ASHRAE education, technical information and all other activities and products will always reflect the best practices that lead our industry. We strive for continuous improvement and innovation in all our practices and products.

#### Commitment

ASHRAE and its members are passionate about serving the built environment, creating value, and recognizing the accomplishments of others.

### Integrity

ASHRAE is committed to the highest ethical standards. We work transparently, observing essential requirements for due process and peer reviews to assure our members and stakeholders that we do the right things the right way.

## **ASHRAE Core Values**

### Collaboration

ASHRAE seeks and embraces collaborative efforts with organizations, agencies, and individuals sharing our commitment to sustainable built environments.

### Volunteerism

Members lead ASHRAE at every level, serving ASHRAE and helping ASHRAE serve society.

### **ASHRAE Code of Ethics**

- As members of ASHRAE or participants in ASHRAE committees, we pledge to act with honesty, fairness, courtesy, competence, integrity and respect for others in our conduct.
- Efforts of the Society, its members, and its bodies shall be directed at all times to enhancing the public health, safety and welfare.
- Members and organized bodies of the Society shall be good stewards of the world's resources including energy, natural, human and financial resources.
- Our products and services shall be offered only in areas where our competence and expertise can satisfy the public need.
- We shall act with care and competence in all activities, using and developing up-to-date knowledge and skills.

### **ASHRAE Code of Ethics**

- We shall avoid real or perceived conflicts of interest whenever possible, and disclose them to affected parties when they do exist.
- The confidentiality of business affairs, proprietary information, intellectual property, procedures, and restricted Society discussions and materials shall be respected.
- Each member is expected and encouraged to be committed to the code of ethics of his or her own professional or trade association in their nation and area of work.
- Activities crossing national and cultural boundaries shall respect the ethical codes of the seat of the principal activity.



#### **ASHRAE STRUCTURE**



## **Associate Society Alliance**



- Created in 1962
- Encourages more effective and fruitful exchange of knowledge and ideas among engineers engaged in the arts and sciences of HVAC&R
- 61 members

# Standards

### Standards

- Developing standards since 1922
- Some 130 active standard or guideline projects
- Standards are reviewed and republished to ensure they are up-to-date, e.g., existing code-intended standards are on a three year review cycle
- www.ashrae.org/standards

### **Standards Development**

- One of six standards development organizations accredited by the American National Standards Institute (ANSI) as an Audited Designator
- Consensus process ensures standards are developed independent of special interests
- Volunteer committees bring together a balanced group of technical experts, professionals, government officials and business representatives

# Most Well-Recognized Standards

- 15, Safety Standard for Refrigeration Systems
- 34, Designation and Safety Classification of Refrigerants
- 55, Thermal Comfort
- 62.1, Indoor Air Quality for Commercial Buildings
- 62.2, Indoor Air Quality for Residential Buildings
- 90.1, Energy Efficiency for Commercial/High-Rise Residential Buildings
- Standard 188, Legionellosis: Risk Management for Building Water Systems
- 189.1, Green, High Performing Commercial Buildings

### **Refrigerant Safety – Standard 15**



ANSI/ASHRAE Standard 15-2013 (Imperandes ANSI/ASHRAE Standard 15-2010) Includen ANSI/ASHRAE addenda landd in Appendix F

#### Safety Standard for Refrigeration Systems

line Appendix Fitte approval dates by the All-PAE Standards Committee, the All-BAE Board of Directors, and the American Naminal Standards Heatman

This state in a work continuum consenses to a baseful plancter Project Convention (MPC) to which the Statebox Convention (MPC) to which the Statebox Convention (MPC) to which the Statebox Convention (Consense aptive or response to the space of a statebox or resums, studied processing to inclusions: convention (MPC) and the Statebox Convention

0.2013 ADHRAS 0001 (041-233)



 Establishes rules for safe application in equipment and systems when using the refrigerant classification system

### **Refrigerant Safety – Standard 34**

 Nomenclature of refrigerants and assigns safety classifications based on toxicity and flammability data



ANSI/ASHRAE Standard 34-2013 (Supervisides ANSI/ASHRAE Standard 34-2010) Includes ANSI/ASHRAE addenda lated in Appendix H

### Designation and Safety Classification of Refrigerants

ies Appendix H for approval dates by the ASHRAE Standards Conventee, the ASHRAE Board of Directors, and the American National Standards Institute

This stended is under communic reperimence by a fancher financial Project Converties (SPC) for which the Spracher Converties (SPC) for strength Converties (SPC) for SPC) for SPC (SPC) for strength Converties (SPC) for SPC) for SPC (SPC) for strength Converties (SPC) for SPC) for SPC (SPC) for SPC (SPC) for SPC (SPC) for SPC) for SPC (SPC) for SPC (SPC) for SPC (SPC) for SPC) for SPC (SPC) for SPC (SPC) for SPC) for SPC (SPC) for SPC (SPC) for SPC (SPC) for SPC) for SPC (SPC) for SPC (SPC) for SPC (SPC) for SPC (SPC) for SPC) for SPC (SPC) for S

© 2013 ASHRAE 55N 1041-2336



### Thermal Comfort – Standard 55

- Sets the standard for what are considered "comfortable" indoor conditions for 80% or more of a building's occupants
  - Settles the "too hot/too cold" debate at offices

### **STANDARD**



ANSI/ASHRAE Standard 55-2013 (Supersedes ANSI/ASHRAE Standard 55-2010) Includes ANSI/ASHRAE addenda listed in Appendix M

### Thermal Environmental Conditions for Human Occupancy

See Appendix M for approval dates by the ASHRAE Standards Committee, the ASHRAE Board of Directors, and the American National Standards Institute.

This standard is under continuous maintenance by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any pair of the standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE Web site (www.ashrae.org) or in paper form from the Hanager of Standards: The lastest edition of an ASHRAE Standard may be purchased from the ASHRAE Web site (www.ashrae.org) or from ASHRAE Customer Service, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305, E-mail: orders@athrae.org, Fax: 678-539-2129, Telephone: 404-636-6400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to www.ashrae.org/permissions.



## Ventilation and IAQ – Standard 62.1

- Specifies minimum ventilation rates and other measures intended to provide indoor air quality that is acceptable to human occupants and minimizes adverse health effects
- Applies to all indoor or enclosed spaces that people may occupy, except where other applicable standards and requirements dictate larger amounts of ventilation



ANSI/ASHRAE Standard 62.1-2013 (Supersedes ANSI/ASHRAE Standard 62.1-2010) Includes ANSI/ASHRAE addenda listed in Appendix J

### Ventilation for Acceptable Indoor Air Quality

iee Appendix J for approval dates by the ASHRAE Standards Committee, the ASHRAE Board of Directors, and the American National Scandards Institute

This standard a under continuous measures by a Standing Standard Praget Convenies SIPC: for which the Standards Conmises has established is douvereally program for regalar publication of address for mesors, including procedures to transis tocomeroes across across on requests for charge to any part of the stantard. The charge submitted form investigation and address may be obtained in electronic form from the AMPARA stantas (see a stantard across the AMPARA Web as (even attract org) or topact bandwints. The baset address of a AMPARA Stantard may be purchased from the AMPARA Web as (even attract org) or form AMPARA Construme. 404-bits 4400 Control. Address of AMPARA Stantard may be purchased from the AMPARA Web as (even attract org) or form AMPARA Construme. 404-bits 4400 Control. Address of AMPARA Address of Control Address of AMPARA Belghane 404-bits 4400 controllowing in set free 1.400-5127.4723 (for orders in US and Canada), for report permission, pis to even attract orginementance.



# Residential Ventilation and IAQ – Standard 62.2

- Defines roles of and minimum requirements for mechanical and natural ventilation systems and building envelope intended to provide acceptable indoor air quality in low-rise residential buildings
- Limits sources of pollutants and requiring enough mechanical ventilation to provide dilution for unavoidable contaminants



ANSI/ASHRAE Standard 62.2-2013 (Supersedes ANSI/ASHRAE Standard 62.2-2010) Includes ANSI/ASHRAE addenda listed in Appendix C

#### Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

See Appendix C for approval dates by the ASHRAE Standards Committee, the ASHRAE Board of Directors, and the America National Standards Institute.

This standard is under continuous maintenance by 3 standing 'standard' Project Committee (DSPL) for which the Standards Cominter has estabilished a documented program for regular plantitication of addends on reviews, including procedures for thread biocomented, contentia action on requests for charge to any part of the standard. The drange stortmail form, instructions, and standards. The tasts: edition of an ASHR4E' Standard may be parchased from the ASHR4E website (www.adhra.org) or from Standards. The tasts: edition of an ASHR4E' Standard may be parchased from the ASHR4E intervention provide provide



### Energy Efficiency – Standard 90.1

- Sets design requirements for the efficient use of energy in buildings
- 2013 version preliminarily referenced in the U.S. Federal Energy Conservation and Production Act
  - 39 states have adopted some version of 90.1 as their energy code

#### STANDARD

ANSI/ASHRAE/IES Standard 90.1-2013 (Supersedes ANSI/ASHRAE/IES Standard 90.1-2010) Includes ANSI/ASHRAE/IES Addenda listed in Appendix F

Energy Standard for Buildings Except Low-Rise Residential Buildings (SI Edition)

See Appendix F for approval dates by the ASHRAE Standards Committee, the ASHRAE Board of Directors, the IES Board of Directors, and the American National Standards Institute.

This standard is under continuous maintenance by a Standing Standard Project Committee (SRC) for which the Standards Committee has estabilited a documented program for registry publication of address darks or evision, including procedures for timely, documented, contensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadines may be obtained in electronic form from the ASHARE Web tes (www.athra.org) or from of Standard, The Iteste election of an ASHRAE Standard may be parchated from the ASHRAE Web site (www.athra.org) or from ASHRAE Customer Service, 1971 Tille Circle, K.F. Attance, GA 30327-3025. Email orders@attance.org; Face 404-321-5478. Telephone: 404-63-6400 (word/wde), or toll free 1-800-527-4723 (for orders in US and Canada), For reprint permission, go to www.athrae.org/permissions.



### Legionella – Standard 188

- Establishes minimum legionellosis risk management requirements for building water systems
- Intended for use by owners and managers of human-occupied buildings and those involved in the design, construction, installation, commissioning, operation, maintenance and service of centralized building water systems and components



ANSI/ASHRAE Standard 188-2015

#### Legionellosis: Risk Management for Building Water Systems

Approved by the ASHRAE Standards Committee on May 27, 2015, by the ASHRAE Board of Directors on June 4, 2015, and by the American National Standards Institute on June 26, 2015.



## Green Building – Standard 189.1

- The "total building sustainability package"
- Compliance option of International Code Council's International Green Construction Code
- Incorporated by U.S. Army, Navy and Air Force into Unified Facilities Criteria for Energy and Sustainability Building Requirements

#### ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 (Supersedes ANSI/ASHRAE/USGBC/IES Standard 189.1-2011)

#### Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings



A Compliance Option of the International Green Construction Code"

Appendix H for approval dates by the ASHRAE Standards Commettee, the ASHRAE Board of Directors, the U.S. Green Build-Council, the Iluminating Engineering Society of North America, and the American National Standards Institute.

This standard a voder communal materianors by a landing Standard Project Comment (SPC) for which the Standards Comnitive has established a documented program for regular publication of addends air revisions, including prosolutions for timely, locumented, commania action on requires for change to any pair of the standard. The dhange submittal form, instructional, and staddines sincy be additioned in electronic form from the ADHRAE website (www.adviae.org) or in paper form from the ADHRAE franze of Standards.

The lates addow of an ASP/BAS Stondard may be purchased on the ASP(BAE websits (www.ahran.org) or from ASI/BAE Caustomer ferroric, 1717) Talle Criche, NL, Harten, CAA 2017-1525. Interphone 444-6146-6400, vanishabiti, or reil two i 1460-5127-1721 (for orders in the United States and Causada), or e-mail: order/ig/Jabrae org. For report permission, go to www.astrae.org/ permission;

© 2014 ASHRAE and U.S. Green Building Council ISSN 104



# Research

### **ASHRAE Research**



- Since 1919, research been at the core of ASHRAE's existence
- Largest program of fundamental and applied research supported by a technical society
  - Currently 60+ active research projects, 40+ projects approved for further development
  - 55 percent of research is conducted by universities; 45 percent is conducted by private research or engineering firms

 More than 800 research projects valued at \$67.5 million conducted since 1960

### ASHRAE Research

- Improves work and application of building systems
- Allows development of technical information to create standards and guidelines
- Projects include sound, duct design, the effect of oil in refrigerants, load calculations, thermal conductivity, simplified energy analysis procedures, weather data, refrigerant property data, fire and smoke control and solar design.

•www.ashrae.org/research

# **Publications**

# ASHRAE Handbook

- Continuously refined and updated, ASHRAE has published its Handbook series since 1920s
- Updated volume published each year with online updates as needed
- Volumes cover HVAC&R fundamentals, systems, equipment and a wide variety of applications
- Available in print, CD and online for member benefit selection options
- www.ashrae.org/Handbook



## **ASHRAE Journal**

- Official monthly publication and member benefit
- Speaks to and for HVAC&R industry leaders in engineering
- Articles are peer-reviewed and focus on technical issues, including green building, indoor air quality, energy management, thermal storage and alternative refrigerants
- www.ashrae.org/ashraejournal





permarket Porfigeration | VAV Terminal Units | Simple Energy Savings Machinery Room Ventilation | ASHRAE Research Report

### HPB Magazine

- Quarterly magazine is read by building owners, facility managers, architects and engineers
- Features case studies of the best performing buildings in the world
- Case studies provide at least one year's worth of operational data to show if building is performing at expected levels
- www.hpbmagazine.org



# Advanced Energy Design Guides

- Prescriptive pre-modeled solutions to reach a given energy savings for a given building type
- 11 Guides available
- More than 500,000 in circulation
- www.ashrae.org/freeaedg


#### **Free Resources**

• www.ashrae.org/freeresources

- Advanced Energy Design Guides www.ashrae.org/freeaedg
- Indoor Air Quality Guide www.ashrae.org/FreeIAQGuidance
- Procedures for Commercial Building Energy Audits <u>www.ashrae.org/pcbea</u>
- Refrigeration Commissioning Guide for Commercial and Industrial Systems www.ashrae.org/freeRefCxGuidance
- ASHRAE Terminology www.ashrae.org/ASHRAETerms

#### ASHRAEjobs.com

- Single location to research career opportunities, including employer profiles and job postings
- Post into a resume database and promote yourself to employers
- Allows employers to search for ASHRAE membership and certifications



## **Education/Certification**

### ASHRAE Learning Institute (ALI)

- Wide range of professional development training
- Variety of lengths and modes of delivery
- Taught by engineers for engineers to provide real world experience
- Enables participants to make immediate impacts in their work



www.ashrae.org/education

#### **ASHRAE Learning Institute**

- Instructor-Led Training
  - Professional Development Seminars
  - Short Courses
  - Spring and Fall Online Courses
  - Intensive HVAC Design Trainings
- Web-Based Training
  - eLearning
- Text-Based Training
  - Self-Directing Learning Texts
  - Group Learning

#### **Commercial Building Energy Audits**





#### **ASHRAE Learning Institute**

- Various Course Categories
  - ASHRAE Standards and Guidelines
  - Commissioning
  - Energy Efficiency
  - Environmental Quality
  - HVAC Applications
  - HVAC Design

Controlled to differential pressure sensor located at most hydraulically distant point incorrect sensor placement can reduce energy savings

Identify any throttling valves on the loop and use VFD to regulate flow

#### **HVAC Design Training**



#### • Intense, multi-day HVAC Design training

- Level I Essentials
- Level II Applications
- Excellent introduction to ASHRAE standards and concepts
- Provide intensive, practical education for designers, others involved in delivery of HVAC services
- Bridges gap between theory and practical application as engineering students transfer from classroom to workforce
- www.ashrae.org/hvacdesign

#### ASHRAE eLearning

- Web-based. Training anytime, anywhere, at your own pace from any computer with Internet access
- Created by leading professionals in HVAC&R and related fields, using ASHRAE's knowledge base
- No special software required, all material included
- Records automatically maintained
- 12 month subscriptions available
- New training is in dual units and fully narrated
- www.ashrae-elearning.org

### Certification



• Validate critical knowledge, skills and abilities in 6 key, built environment jobs:

- Building Energy Assessment (BEAP)
- Building Energy Modeling (BEMP)
- Commissioning Process Management (CPMP)
- High-Performance Building Design (HBDP)
- Healthcare Facility Design (HFDP)
- Operations & Performance Management (OPMP)

#### Certification

 Recognized by 20+ national, state and local government bodies

- Over 2,000 certifications earned
- Member discounts. More information at <u>www.ashrae.org/certification</u>

#### **ASHRAE** Certification



Stand Out By Today's Standards

# Membership

## ASHRAE's Young Members









Student Members & Young Engineers in ASHRAE



#### Membership

- Student Member
  - In approved course of study in Societyrelated field
  - Must be a full-time student
- Associate Member
  - Members with less than 12 years experience in the industry
  - Typically just out of school, new to the field or only a few years into their careers

#### Young Engineers in ASHRAE

- Program to address the needs of members age 35 or younger
- Provides unique networking opportunities, workshops and other resources to help young members gain an advantage in their field



## **Resources for Student Members**



#### Scholarships

• Over 320 scholarships available for:

- Undergrad engineering and engineering technology students
- Specific universities or ASHRAE regions/chapters
- High school seniors entering college

• www.ashrae.org/scholarships

2014-2015 ASHRAE Scholarship	S! ASHRAE
S10,000 Willis H. Carrier Scholarship Finnet Romew/load State University/Metalanda In Face States/View of Alakki/Metalanda In S10,000 2-Year Rouber Trans Scholarship Alex Subper/Morth Carolina State University/Metalanda Alex Subper/Morth Carolina State University/Metalanda Mark December 1000 1000 1000 1000 1000 Mark December 1000 1000 1000 1000 S5,000 Scholarships	gineering earling
Frank M. Code	
Gorth Greener/Lakebrad University Mechanical Engineering	Denid C. J. Peters Harrison Erby/University of Newsda/Michaelanical Engleseeing
Hynn G. Bellenger Ketelyn Stenger/Rose-Hulman Institute of Technology Mechanical Engineering	Memorial Nicale Barber/University of Regime Environmental Systems Engineering
Courtney Hart/Vermont Technical College Architectural Engineering technology	Gensial Scholarship Reshaven Kope/University of California Mochanical Engineering
Engineering Tachnology Nicholas Cuettarman/Southern Illinois University Industrial Technology	Arkinema Bandyopathyay Oktohoma State University/Mechanical Engineering
\$3,000 Scholarships	
2. Richard Weitensch. Nich Polosest/University of Michardy/Michardod Ingeniering	ASMERSE Regiments Meagurees Salte Reprint Astronomy (Processing) - Salte Orientetty/Astronomics Engineering
Alwin B. Newton Androw Negos/Dimensity of Bassis/Machinesi Phylosected	AGUBAE Deglion TV Serving Section (poststate Property/fact states Cartylening / Section Togenaeting)
Hunty Adams Another Menkethof/UNIVersity of Locanos/Merternal Engineering	AlisBAE Region Via Republic Spectrum Via Republic Spectrum Via Republic Spectrum Viantum Viantum Viantum Viantum
Duario Harrison Mitchalls Sherionar/University of Southern California Mechanical Transacting	Paugh Schward Berlart Americ Schward Welcherstein Schlag Commission fallings Commission Schward Schlarter, R. Terthgeratory
Destable E. Nichols Anthony Tradeor/Tensorger Technological University Methodastical Engineering	Venues Rennel/Person/Venues Media Serversity/Medianter Progression Media Schledit/University III InternationAduations Progression
Mineratoria Charpter Molthera: Hamilton, Urbers Jay of Wisconsan/Mechanical Cognessi	Charles Galacervice and Antonia Street Concerns Recommend Entermanent

Cong

Apply TODAY! www.ashrae.org/scholarship

#### Grants

Senior Undergraduate Project Grants provide grants to engineering, technical and architectural schools worldwide

- Potential \$5,000 maximum award per team
- Deadline is Dec. 15 annually



#### Grants

- Graduate Grant-in-Aid encourages students to continue their education
- Grants total \$210,000: \$10,000 per project
- Awarded to full-time graduate students of ASHRAE-related technologies



#### **Design Competitions**

- Student Design Competition
  - Opportunity to apply real-world design practices, work on teams, model buildings, etc.
  - Four categories in which to compete:
    - HVAC Design Calculations
    - HVAC System Selection
    - Integrated Sustainable Building Design
  - Applied Engineering Challenge
    - Promotes technology that can be applied throughout the globe in applications that are simple, affordable and easy to use

## New Faces of Engineering: College Edition

- Recognition program from National Engineers Week highlighting up-and-coming engineering students
  - -Juniors, seniors or fifth year students are eligible
  - Nominees must be working toward a degree in engineering from a recognized U.S. college or university
- ASHRAE's top nominee receives a \$1000 scholarship
- Gain international recognition in your future field

#### SmartStart Program

Allows those who are student members to transition into associate membership at reduced membership fee

- First year out of college, annual membership is the same as the student rate
- Reduced rates the second and third year



# Resources for Young Engineers in ASHRAE



#### YEA Leadership Weekends

- Leadership Weekends are open to all YEA members:
  - In the spring on the West Coast
  - In the fall on the East Coast
  - YEA Leadership International
- Opportunity for future leaders of ASHRAE to learn more about:
  - Society
  - Developing soft skills
  - Networking with other young professionals



#### YEA Leadership Weekends

- Includes segments on:
  - Understanding your own personality as well as other types
  - Leadership development for young professionals
  - Communication techniques
  - ASHRAE leadership opportunities
- Objectives are:
  - Leadership
  - Networking
  - Communication
  - Professional Development



#### Mentoring

- Allows YEA members to form a relationship with a fellow ASHRAE member
  - Mentors can give a more in-depth understanding of the profession and ASHRAE in general
  - YEA members can network and seek guidance from experienced members
- YEA members may also be interested in mentoring student members, either:
  - Senior grant teams
  - Student design teams
  - Local student branch

#### **New Faces of Engineering**

- Recognition program for National Engineers Week highlighting up-and-coming engineers from the world's top engineering societies
  - Engineers 30 years of age or younger as of Dec. 31 of the current year are eligible
  - Nominees must have a degree in engineering from a recognized U.S. college or university

Gain international recognition in your field

#### **ASHRAE Conferences**

- Annual Conference in June
- Winter Conference in January (coincides with AHR Expo)
- Variety of specialty conferences on a variety of topics around the world
- www.ashrae.org/conferences



To Join or Renew - www.ashrae.org/join To Get More Involved -www.ashrae.org/volunteer