



JANUARY - VOLUME LVI ISSUE 05

THERMOGRAM

MAIN MEETING: INTRO TO STANDARD 241 VIRTUAL TECH SESSION: REDUCING AIRBORNE PARTICULATES

ASHRAE Meeting Details:

January 4, 2024 - Thursday

Lunch Virtual Meeting: 12:00 - 1:30pm

Networking Hour: 5:00 - 6:30 pm

Main Dinner Meeting: 6:30 - 8:00 pm

Registration for virtual tech session only is free for members, \$10 for non-members.

Dinner meeting is \$35 for members, \$45 for non-members, registration includes virtual tech session.

Tech Session: Reducing Airborne Particulates Using Displacement Ventilation **Speaker: Ben Arikpo - Application Engineering Manager, Sustainable Systems - Price Industries**

Stratified air systems are a style of air distribution shown to improve air quality and energy savings compared to traditional overhead mixed air ventilation systems. Their initial popularity in industrial spaces stemmed from the systems' ability to reduce the amount of unhealthy airborne chemicals and particulates in the breathing zone. This presentation reviews new research that compares the behavior of airborne particulates ($0.3 \mu\text{m}$ – $5.0 \mu\text{m}$) generated by an occupant in a typical office environment when ventilated with a stratified air system and a traditional overhead mixed air system.

Main Meeting: An Introduction To ASHRAE Standard 241 Control Of Infectious Aerosols

Speaker: Brendon Burley, PhD, PE, LEED AP - BKM

ASHRAE Standard 241 was developed in the shadow of the COVID-19 pandemic and seeks to standardize the guidance developed by ASHRAE's Epidemic Task Force including lessons learned related to that guidance. The standard was developed on a truncated timeline with the entire document written between December of 2022 and June of 2023. This presentation is intended to explain the risk model used to develop the requirements in the standard, layout compliance with the standard, and discuss some of the specific requirements associated with air distribution, air cleaning, and maintenance.

2023-2024 Chapter Leadership Roster

Board of Governors

	President Terry Schroeder	president@ashrae-balto.org, P: 443.224.1594 WRA		Governor/Asst. Secretary Rob Broczkowski	asstsecretary@ashrae-balto.org, P: 571.318.7310 ETC
	President-Elect Kevin Lindemann	vp@ashrae-balto.org, P: 410.561.1655 Chesapeake Systems		Governor Luis Belisario	gov2@ashrae-balto.org, P: 410.807.8279 Prime AE
	Treasurer Kaylee Haupt	treasurer@ashrae-balto.org, P: 443.789.0188 Baltimore County Public Schools		Senior Advisor Sam Philipp	senioradvisor@ashrae-balt.org, P: 410.316.2485 JMT
	Secretary Simona Georgiev	secretary@ashrae-balto.org, P: 410.316.2263 JMT		Past President Nancy Neely	pastpresident@ashrae-balto.org, P: 410.746.4168 Johnson Controls

Committee Chairs

Attendance/Recpt. Co-Chair: Elyas Khan, JCI reservations@ashrae-balto.org	Government Affairs: Tyler Brown, ATS gga@ashrae-balto.org	Research Promotion Co-Chair: Joe Petty, ATS research@ashrae-balto.org
Attendance/Recpt. Co-Chair: Tim Scheck, C-W reservations@ashrae-balto.org	Golf Outing: Tyler Lee, Chesapeake Systems golf@ashrae-balto.org	Scholarships: Hailey Brennan, Spectrum Energy scholarship@ashrae-balto.org
Christmas Party: Wade Myers, JMT christmas@ashrae-balto.org	Historian: Jennifer Leach, BR+A historian@ashrae-balto.org	Student Activities: Abe Undieh, Chesapeake Systems studentacts@ashrae-balto.org
Chapter Programs: Kevin Lindemann, Chesapeake Systems programs@ashrae-balto.org	Historian Co-Chair: Terry Schroeder, WRA historian@ashrae-balto.org	Thermogram: Terry Schroeder, WRA newsletter@ashrae-balto.org
CTA (Tech Awards): Kevin Lindemann, Chesapeake Systems cta@ashrae-balto.org	Membership: Rich Girard, RMF membership@ashrae-balto.org	Young Engineers: Co-Chair: Matt Francis, ATS yea@ashrae-balto.org
Diversity in ASHRAE Co-Chair: Patrick Harrilal, JMT dia@ashrae-balto.org	Membership Co-Chair: Ben Joel, WSP membership@ashrae-balto.org	Young Engineers Co-Chair: Matt Hart, ATS yea@ashrae-balto.org
DIA Co-Chair: Ashleigh Newman, The Morin Company dia@ashrae-balto.org	Refrigeration: Jon Olmstead, Hobbs & Associates refrigeration@ashrae-balto.org	Web Technicians: Vikas Kiran, Prime AE Maggie Palacz, Schneider Electric ashtech@ashrae-balto.org
Engineers Week: Nick Spicher, Chesapeake Systems engweek@ashrae-balto.org	Research Promotion Co-Chair: Michael Poe, Legacy Engineering Group research@ashrae-balto.org	Women in ASHRAE: Nicole Harshbarger, Schneider Electric wia@ashrae-balto.org

PRESIDENT'S PEN

Thank you to everyone who came out to the Christmas Party this year! We all look forward to the party every year, and the chance to catch up with friends in the industry that we haven't seen for a while. We hope everyone has enjoyed the additions of the silent auction and this year's Yeti cooler raffle - feel free to let us know your thoughts at christmas@ashrae-balto.org!

January will bring us a local meeting on infectious aerosols, back on our regular first Thursday at the ESB. At the end of the month the ASHRAE Winter Conference will be held in Chicago at the Marriott Marquis Chicago Hotel! Registration is online at www.ashrae.org.

Also in Chicago will be the AHR Expo, which will be right across the street from the ASHRAE Conference at McCormick Place. Registration for the Expo is included in your ASHRAE Conference registration, or you can register for just the Expo for free at www.ahrexpo.com.

Can't wait to see everyone again in the new year!


Terry Schroeder
ASHRAE President



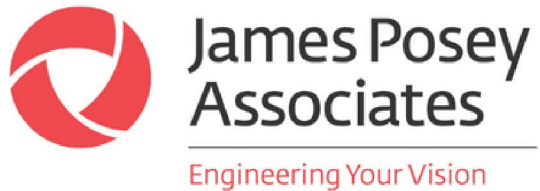
**2024 ASHRAE
WINTER CONFERENCE**

CHICAGO, JAN 20-24 | AHR EXPO, JAN 22-24



23-24 CHAPTER SPONSORS

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MEETING SCHEDULE

September 7, 2023	Tiki Lee's Social
October 5, 2023 @ESB	Tech: Building Envelope and HVAC Main: ASHRAE 62.1 IAQ Procedure Research Promotion Night
November 1, 2023 @ESB	Tech: Net Zero Carbon Design & Performance Main: Radiant & Hydronics for Decarb Membership Promotion Night
December 1, 2023 @Timonium Fairgrounds	73rd Annual Christmas Party!
January 4, 2024 @ESB	Tech: Reducing Airborne Particulates Main: Standard 170 - Healthcare Ventilation
February 1, 2024 @TBD	Tech: Refrigerant Phasedown Main: Refrigeration Tour, Liquidity Brewery
March 7, 2024 @ESB	Tech: TBD Main: Inflation Reduction Act and Tax Credits for Thermal Storage
April 4, 2024 @ESB	Tech: TBD Main: Maryland Building Energy Performance Standards Update
May 2, 2024 @ESB	TBD

UPCOMING EVENTS



2024 ASHRAE Research Promotion 2nd Annual Golf Skills Competition!

Come shake off the winter rust and put your golf skills to the test to be crowned ASHRAE RP's 2024 Golf Champion. This event is fun for all skill levels, whether you are ready for the PGA Tour or your golf experience consists of an occasional mini golf hole-in-one. You can bring your own clubs or clubs will be provided if needed. Events will include putting, chipping, long drive, and closest to the pin. Long drive and closest to the pin competitions will be held in an indoor Trackman simulator bay. Competing in all four events will only take approximately an hour, but everyone is welcome to come before and/or stay after their tee time to network and/or watch your fellow competitors succeed...or fail. A real-time live leaderboard will show you where you rank, and prizes will be awarded for each event, with a grand prize for the overall winner! All proceeds will benefit ASHRAE RP.

<u>Date / Time</u>	<u>Cost</u>	<u>Sponsorships</u>	<u>Location</u>
01/12/2024 1pm - 7pm	\$40 / Person \$150 / Foursome <small>*100% of registration fee will be counted as a donation to ASHRAE RP</small>	Food: \$300 Drinks: \$250 Prizes: \$200	Advanced Thermal Solutions 601 N. Hammonds Ferry Rd, Ste F-J Linthicum, MD 21090

Specific tee times will be able to be reserved after sign-up, so register now to ensure your preferred start time! Spots will fill up quickly!

VISIT <https://ashrae-balto.org/meetinginfo.php?id=109> TO REGISTER TODAY!
Please reach out with any questions to Mike Poe or Joe Petty at research@ashrae-balto.org

BALMER DIRECTORY

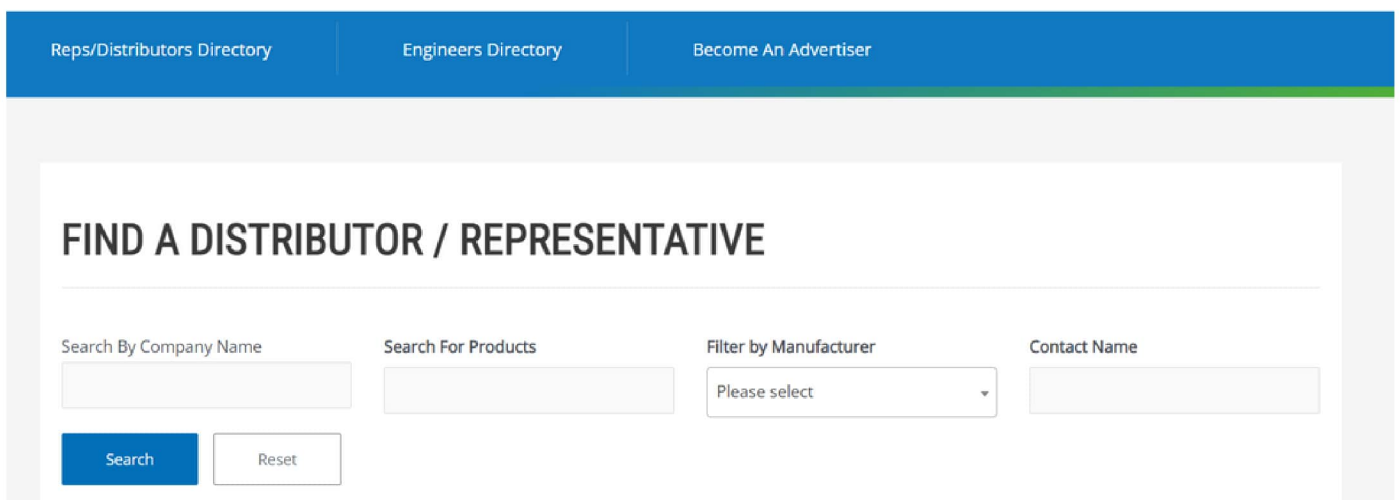
Are you looking for a local manufacturer's rep that sells a specific product? Maybe you are looking for an engineering firm to partner with? If so, check out www.ashrae-balmer.org!

Baltimore ASHRAE is thrilled to provide BALMER - the Baltimore Area List of Mechanical Engineering Resources - a website dedicated to advertising local equipment representatives and engineering firms to make it easier to find products, reps, engineers, and their contact information.

If you are interested in listing your firm, please head to the site and click on the "Become an Advertiser" link in the main navigation bar. Rates are:

\$500/year for Reps/Distributors
\$250/year for Engineering Firms

All content on BALMER is self-managed, and your renewal period starts on the day you register. Please reach out if you have questions! president@ashrae-balto.org.



The screenshot shows the top navigation bar with three links: "Reps/Distributors Directory", "Engineers Directory", and "Become An Advertiser". Below the navigation bar is a search interface titled "FIND A DISTRIBUTOR / REPRESENTATIVE". The search interface includes four input fields: "Search By Company Name", "Search For Products", "Filter by Manufacturer" (with a dropdown menu showing "Please select"), and "Contact Name". There are two buttons: a blue "Search" button and a white "Reset" button.

TECHNOLOGY AWARDS

GET RECOGNIZED!

Do you have an innovative project that has been in operation for at least 1 year? Apply for the Chapter Technology Award! Technology Award winners at the Chapter level will go on to compete at the Regional Level, and those winners will move on to the Society level competition.

Awards are given in 6 categories:

- Commercial Buildings
- Institutional Buildings
- Health Care Facilities
- Industrial Facilities/Processes
- Public Assembly
- Residential



Awards are great for marketing and recognition, and there is no fee to apply!

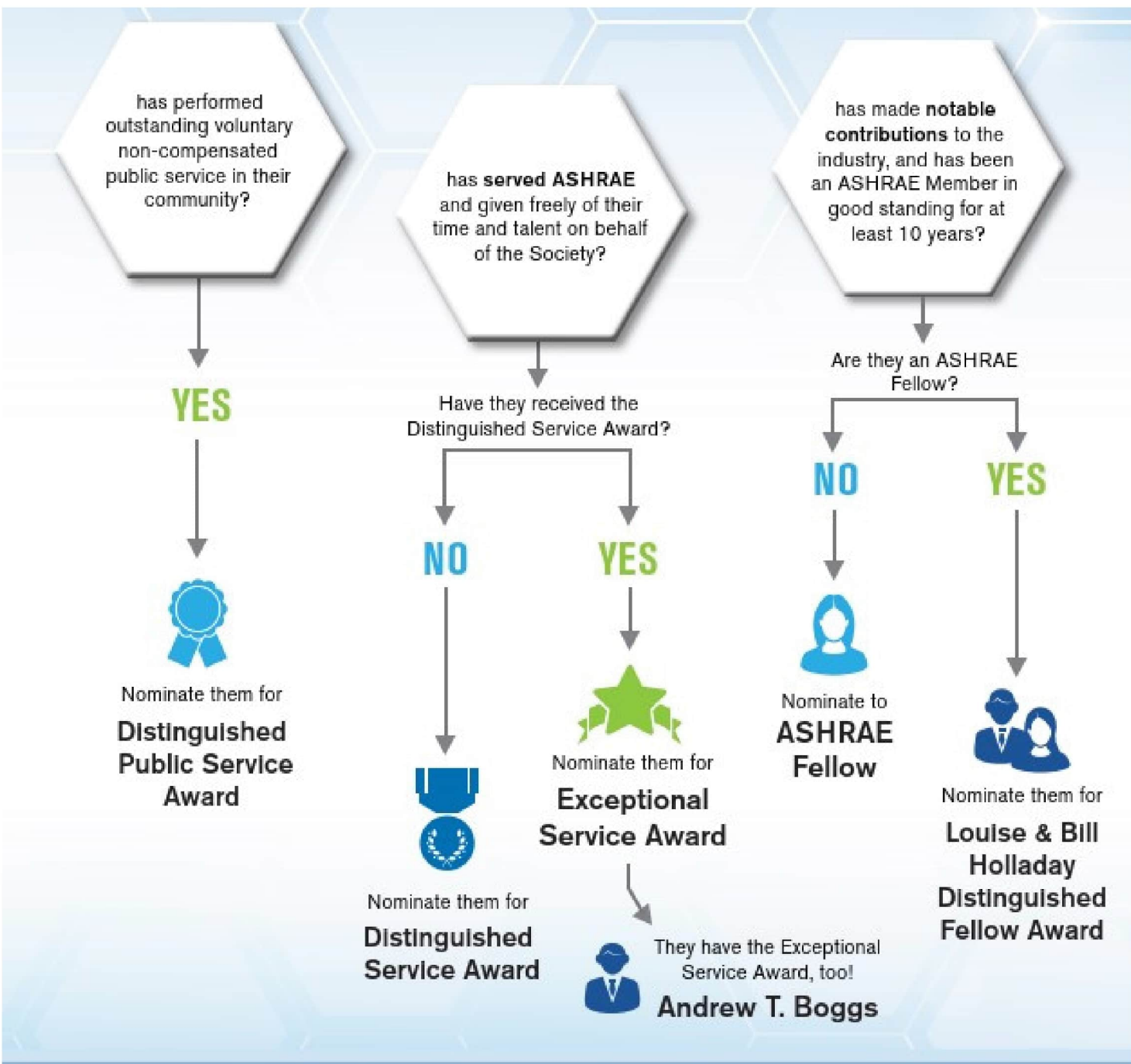
For additional information
and application visit



www.ashrae-balto.org/CTA

MEMBER AWARDS

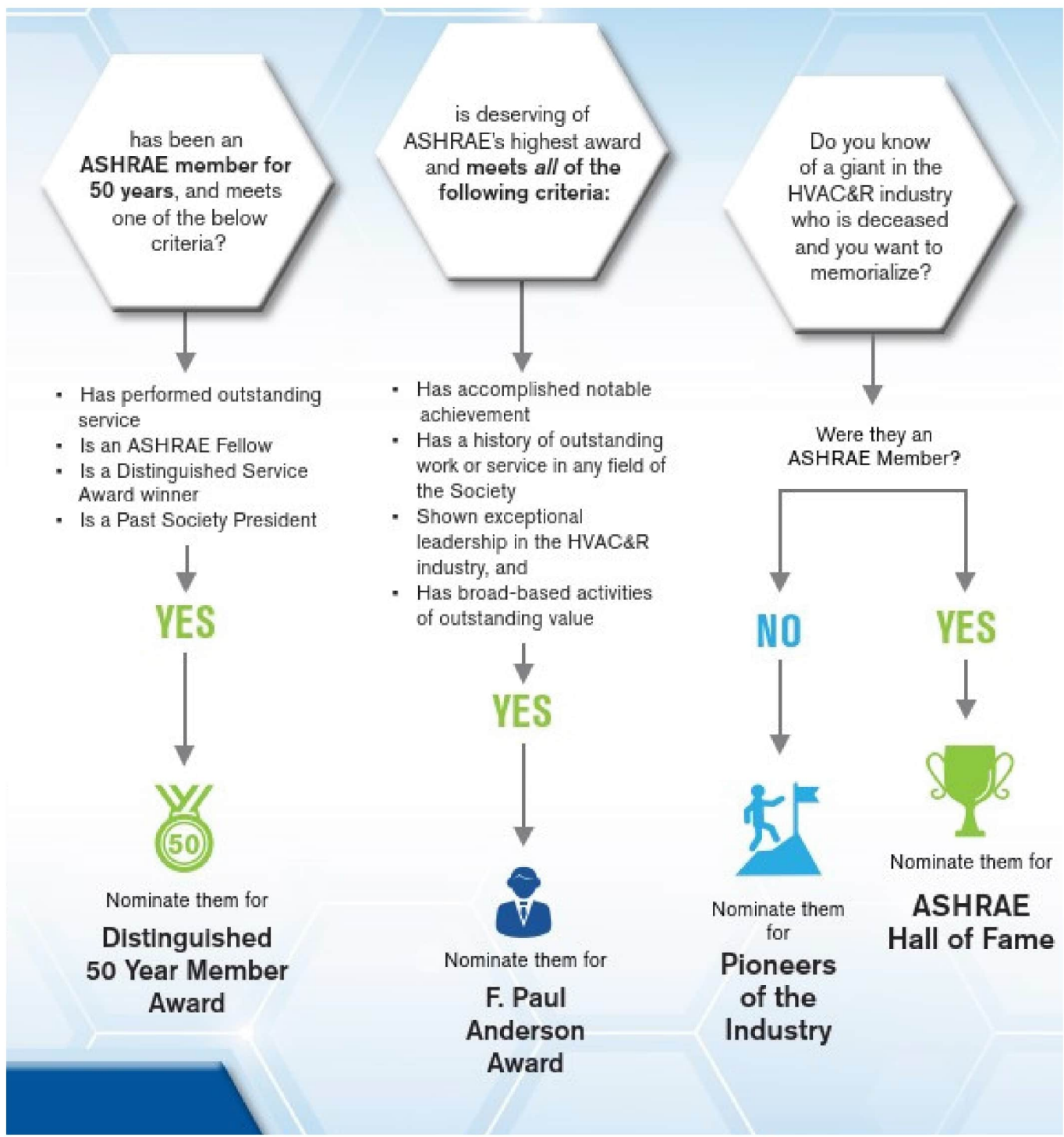
Do you know an ASHRAE member who...



Learn more and nominate someone today at ashrae.org/honorsandawards

MEMBER AWARDS

Do you know an ASHRAE member who...



SCHOLARSHIPS



**2023-2024
Scholarship**

**Multiple Winners:
\$750-\$2500**

**Applications Accepted
Until - February 23, 2024**

Questions? Email Us!
scholarship@ashrae-balto.org

SCHOLARSHIPS

Scholarship applications are available online at
www.ashrae-balto.org/scholarship

Evaluation Criteria:

1. Applicant is pursuing a career in an ASHRAE-related engineering field.
2. Applicant is enrolled in an ABET-accredited college program (or a program pre-approved by the Baltimore Chapter Board).
3. Applicant is residing in, or moving to, the Baltimore Chapter assigned area as a permanent resident.
4. Applicant has high scholastic standing or grade average from the previous academic year.
5. Applicant demonstrates financial need.
6. Applicant is currently working in the HVAC&R industry.
7. Applicant is a direct relative of an ASHRAE Baltimore Chapter member.
8. Applicant is a veteran with an Honorable Discharge or member of the United States Armed Services.
9. Applicant is a member of the Black, Indigenous, and People of Color (BIPOC) community.

Items 1-3 are required. Items 4-9 provide additional weight to the final consideration for awards.

