



# DAYTON CHAPTER

WWW.DAYTONASHRAE.ORG

ISSUE VI | 2022

## CURRENT OFFICERS

### PRESIDENT

**Matt Dill**

Matthew.dill@victaulic.com  
Victaulic

### PRESIDENT-ELECT

**Jennifer Eller**

jmeller@heapy.com  
Heapy

### TREASURER

**Trent Hayden**

thayden@netgainsengineering.com  
Netgains Engineering P.C.

### SECRETARY

**Zak Schultz**

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## Featured Sessions

### Why You Shouldn't Lick Your Filter

Seminar 48 (Intermediate) | Track: IAQ, Energy Use, Comfort and Health of Sustainable Buildings

### Importance of O&M to Energy Efficiency, Comfort, IAQ and Energy System Decarbonization

Seminar 14 (Intermediate) | Track: IAQ, Energy Use, Comfort and Health of Sustainable Buildings

### Designing for Air Source Heat Pumps in Cold Climates

Seminar 21 (Intermediate) | Track: Cold Climate Building System Design, Operation and Resilience

As part of ASHRAE's Commitment to Care, ASHRAE will provide [complimentary, onsite COVID-19 testing](#) at the Sheraton Centre Toronto (headquarter hotel) for registered, international attendees. This testing is intended to offer convenience for return travel to countries requiring negative tests. ASHRAE is committed to the health and safety of our members and conference attendees and is closely monitoring guidance from the [Centers for Disease Control and Prevention](#), the [World Health Organization](#), and [local health agencies](#) regarding travel and [entry into Canada](#). Please review [ASHRAE's Commitment to Care](#) for the Annual Conference along with additional resources for international travelers.

# FROM THE PRESIDENT

**THANK YOU**

Thank you to everyone that joined us for our annual golf outing. We had another successful year at Pipestone Golf Club. Thank you to everyone that helped out with the event. Mike Weisman did an excellent job organizing this year's outing. Thank you to all of our event and hole sponsors.

The ASHRAE Region V Chapter Regional Conference is being held this year in Fort Wayne, Indiana. This year's conference is being held July 28<sup>th</sup> – 30<sup>th</sup>. This will be our first conference held in person since 2019.

We have positions available if anyone is interested in getting involved with the Dayton Chapter. Please reach out to a member of the board if you are interested in getting involved with the Dayton ASHRAE Chapter.

Thank you, *Matt Dill* – President, Dayton ASHRAE

## Upcoming Events

**May 18th**

Board of Governors  
8:00 AM, Virtual Meeting

**May 27th**

ASHRAE Golf Outing  
9AM start

**June 15th**

Board of Governors  
8:00 AM, Virtual Meeting

[See Additional  
Events & Volunteer  
Opportunities Here](#)

## CHAPTER HISTORY (1966-1967)

**President:** John R. Patterson Trane Company

**Vice Pres:** Gifford Solem Johnson Service

**Secretary:** Norman Pleimann Hughes Bechtol

**Treasurer:** Thomas Ferdelman Ahart & Assoc.

**BOD:** Cecil York Hughes Bechtol

Regional Director: Don Phillips

Meetings were held at the Dayton Engineering Club.  
CRC held in Akron, Ohio.

**1965-1966:** The chapter had \$8 when started. The Engineers Club did not have a liquor license, so Glen Black offered his to the meetings and could only be used at the Engineer's Club.



## Committee Chairs

### **MEMBERSHIP**

**Vincent Caudill**

vcaudill@ecomfortohio.com  
Environmental Comfort, LLC

### **HISTORY**

**Bryan Schenck**

Brian.Schenck@waibelenergysystems.com  
Waibel Energy Systems

### **COMMUNICATIONS**

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Waibel Energy Systems

### **RESEARCH PROMO**

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TEM Associates, LLC.

### **STUDENT ACTIVITIES**

**Russell Marcks**

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Sinclair Community College

### **CTTC**

**Evan Nutt**

ENutt@elitaire.com  
ElitAire

### **GOVERNMENT AFFAIRS**

**Paul Hawkins**

Paul.Hawkins@waibelenergysystems.com  
Waibel Energy Systems

**YEA (Chair)**

**Phillip Reid**

PAReid@heapy.com  
Heapy

## Board of Governors

**Rick Pavlak**

Heapy

**Lorraine Kapka**

Sinclair College

**Evan Nutt**

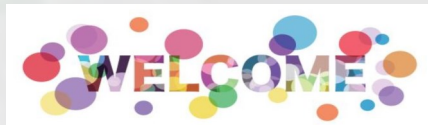
ElitAire

# MEMBERSHIP

## New Members

The Dayton Chapter is happy to welcome its newest members. If you see them please give them a warm welcome!

**May: Gary Gaither, David Ayton & Lukas Jakubaskas**



**Do you know a colleague that would benefit from joining ASHRAE?**

You can go to [http://web.ashrae.org/connect\\_a\\_colleague/](http://web.ashrae.org/connect_a_colleague/) and quickly sign up for ASHRAE to send an email to ask them to sign up on your behalf.

## Membership Recognition

We would like to recognize the following members who have been with ASHRAE for the following years! Thank you for all your contributions to the field!

**5 Years:**

**Alex Stapleton &  
Daniel Papay**



## **Membership Promotion Committee**

Looking for a way to get involved with your local ASHRAE chapter and meet new people? The membership promotion committee is looking for volunteers to join the committee. The committee's primary responsibility is to recruit new members and retain existing members. If you are interested in serving please contact **Vincent Caudill** at [vcaudill@ecomfortohio.com](mailto:vcaudill@ecomfortohio.com) or by calling 513-512-5359.

**Membership Application Here**

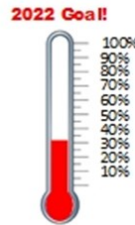
# ASHRAE RP

We are down to a final month of the ASHRAE fiscal year. We know many of you donate at the end of the year, so we are confident you will help us reach our goals. To date, we are at 39% of our goal for the fiscal 2021-22 ASHRAE year. To all those have donated this year, we appreciate your support! The campaign ends with end of the ASHRAE year on June 30, 2022. If you have not donated, now is the time to do so in order to receive the recognition that you deserve as a supporter of ASHRAE. Please consider donating to ASHRAE RP / Education / Scholarships. See the link BELOW to donate today!

Please note again that in order to be recognized with a commemorative coin, and have your name published in the ASHRAE Journal, the minimum donation is \$150 for individuals and \$500 for Corporate Donors .

**2021 Goal =**            **\$ 19,680**  
**YTD =**                    **\$ 7,725**  
**To go =**                   **\$ 11,955**

**% to GOAL:**            **39%**



## Partner Level

## Honor Roll

## Bronze Level

Steve Meier  
Tom Mastbaum  
Evan Nutt  
Brian Turner  
Lorraine Kapka  
Trent Hayden  
Vince Caudill  
Kyle Schroeder  
Bryan Schenck  
Zak Shultz  
Jennifer Eller  
Matt Dill  
Samuel Tobias  
Dennis Helmig

Uptime Solutions  
Russell Marcks

## Silver Level

Waibel Energy  
Dayton ASHARE Chapter

## Honorable Mention

Keith Strayer  
Jeremy Fauber

**Thanks for all your help and support. If you would like to donate NOW simply click this link:**



## DONATE NOW

And make your donation to help ASHRAE in its Research Efforts. Thank you so much!!



# ASHRAE News

## ASHRAE Job Board

[Sales Engineer Account Executive Business](#)

[Development Industrial Commercial Systems, Inc.;](#)  
Vista, Calif.

[Senior Mechanical Engineer Buildings](#) CBCL Limited;  
Halifax, N.S., Canada

[Mechanical Engineer Branch](#)Pattern; Denver, Colo.

[Plumbing/Fire Protection Engineer \(P/FP\)](#) The LiRo  
Group; Boston, Mass.

[Mechanical HVAC Engineer](#) Delta Engineering Group,  
LLC; Chicago, Ill.

[Refrigeration Controls Engineering Manager](#) Logic  
Technologies; Stockbridge, Ga.

[HVAC Design Engineer](#) Shultz Engineering Group;  
Charlotte, N.C.

[Category Manager - Electrical Components](#) Trane  
Technologies; Davidson, N.C.

[Refrigeration Controls Engineering Manager](#) Logic  
Technologies; Stockbridge, Ga.

[Mechanical Engineer](#) Hopkins | Lacy; Roanoke, Va.

[View All](#)

## VAISALA FREE Webinar Common pitfalls in HVAC sensor installation

June 23, 2022  
1:00 p.m. ET

### Vaisala Free Webinar

In this webinar, an expert from Vaisala will cover sensor installation best practices for monitoring in an HVAC application. The most common pitfalls to avoid and important considerations when installing HVAC sensors will be addressed. [Click here to register.](#)

# ASHRAE News

## Dragonscale' Solar Panels Capture Sunlight at Google's New Calif. Campus



At Google's new campus in California, it isn't immediately obvious that the roofs are covered in solar panels. But the sprawling canopies on each building are covered in 50,000 small, silver-colored "dragonscale" photovoltaic panels, shaped to optimize the times they can generate solar power throughout the day. [Read more](#)

## **ASHRAE Member Dennis Knight Speaks at DOD Unified Facilities Criteria Program Workshop**

Dennis Knight, P.E., Fellow ASHRAE, served on the "Industry Code Body Perspective" panel at the U.S. Department of Defense Unified Facilities Criteria Program – FY22 Discipline Working Group Workshop. Knight spoke on ASHRAE's standards and guidelines, and also discussed how standards may be evolving. Knight fielded several questions including on Standard 90.1. The panel also included representatives from National Fire Protection Association and the International Code Council.

ASHRAE Member and Fellow Dennis Knight, P.E met with staffers in the offices of Senator Lindsey Graham and Senator Tim Scott. Knight provided an introduction to ASHRAE and how it develops standards and its technical expertise. Knight also highlighted ASHRAE's education and training resources. Both offices were thankful to be introduced to a non-partisan and respected technical organization, and expressed interest in consensus-based standards development and how it can guide federal investments.

## **ASHRAE Member Featured in DOE Webinar: HVAC Inspection and Maintenance for Indoor Air Quality**

The Efficient and Healthy Schools Campaign hosted a webinar entitled, "HVAC Inspection and Maintenance for Indoor Air Quality" on May 20. On this webinar, **ASHRAE Member Chris Ruch** shared resources on ventilation verification and HVAC assessment, including the latest ASHRAE guidance from ASHRAE's Technical Committee 9.7 Educational Facilities working group. Two school districts - Newark Board of Education, NJ and Mariposa County Unified School District, CA – also shared their success stories. Discussion topics included utilizing approaches to aid systemic inspection of equipment, performing testing, adjusting, and balancing (TAB) to verify HVAC performance, ongoing workforce training, and additional steps to ensure effective filtration and optimized performance. More information about the webinar can be found [here](#).



# ASHRAE News

## **International Energy Agency: Roadmap for Energy-Efficient Buildings and Construction in the Association of Southeast Asian Nations**

In the [Association of Southeast Asian Nations \(ASEAN\)](#), buildings account for close to a quarter of the region's total final energy consumption and energy-related CO2 emissions. The [International Energy Agency's \(IEA\) Roadmap for Energy-Efficient Buildings and Construction in ASEAN](#) focuses on the policy tools available for ASEAN Member States to drive energy efficiency improvements in the building sector to help meet growing needs for residential and non-residential floor space and energy services, while limiting the growth in energy demand and related emissions. It identifies key energy-efficient and low-carbon actions and activities that governments could consider for implementation by 2025, 2030 and beyond, moving towards net zero-carbon buildings. To read the report, please visit [here](#).

## **HCFC-141b Levels on the Rise Despite Crackdown**

Levels of HCFC-141b, an ozone-destroying chemical, are mysteriously rising, despite international efforts to crack down on the problem. The increase in the airborne chemical comes even though reported production has declined steadily since 2012, leaving scientists uncertain about the source.

Production of HCFC-141b should be declining by now, with its phase-out beginning in 2013 and a complete ban scheduled for 2030 in favor of chemicals that do not damage the ozone layer. However, scientists say [atmospheric levels of HCFC-141b are actually rising](#). Emissions have climbed each year between 2017 and 2021, an increase totaling 3,000 tons from 2017 to 2020, the researchers estimate. To read more, please visit [here](#).

## **Negotiations Begin for the "Bipartisan Innovation Act"**

On May 12th, the Senate Commerce, Science and Transportation Committee, chaired by Sen. Maria Cantwell (D-WA), held the first of many hearings to remedy the differences between the House and Senate versions of the Bipartisan Innovation Act, which combines the America COMPETES Act of 2022 (H.R. 4521) with the United States Innovation and Competition Act of 2021 (S. 1260.) The 4-hour hearing was a chance for some of the 107 members on the Conference Committee to make known what issues they will be prioritizing during negotiations. Members spoke broadly of the importance of research and development to maintain American competitiveness, specifically through manufacturing, clean energy, STEM education and workforce development. A recording of the hearing can be found [here](#).

## **DOE Publishes New Energy Efficiency Rule for Manufactured Housing**

The Department of Energy (DOE) published its final rule for *Energy Conservation Standards for Manufactured Housing*, based on the 2021 version of the International Energy Conservation Code (IECC). The rule comes 15 years after the agency was first tasked with creating an energy efficiency rule for manufactured homes, based on direction from the Energy Independence and Security Act of 2007. During the rulemaking process, ASHRAE submitted a letter requesting DOE evaluate the costs and benefits of promulgating a standard based on Standard 90.2, including its additional benefits to energy efficiency, but ultimately a detailed analysis was not conducted. A copy of the letter can be found [here](#).

## **Report: Resilient Retrofits: Climate Upgrades for Existing Buildings**

The [Urban Land Institute's](#) recent report, [Resilient Retrofits: Climate Upgrades for Existing Buildings](#), introduces real estate actors, designers, policymakers, and finance professionals to the opportunities and challenges of preparing existing buildings for accelerating physical climate risks, including extreme temperatures, floods, storms and high winds, seismic risks, water stress/drought, and wildfires.

The report includes the business case for resilient retrofits, a summary of several design strategies for each physical climate risk, a selection of public-sector policies influencing the retrofit context, and an array of financing solutions applicable to retrofits. To read the report, please visit [here](#).

## **ASHRAE Technology Award: Rethinking Hospital Design**

*By Paul Marmion, P.Eng., Life Member ASHRAE*

Using integrated design helped that the Abbotsford Regional Hospital and Cancer Centre to achieve an annual savings of \$475,000. Strategies included high-efficiency (85%) gas-fired hot water boilers, two at 4,900 kW and one at 2,000 kW, and a flue gas heat recovery system for building reheat loads and domestic hot water heating. [Read more](#)

## **Healthcare Facilities: Best Practices for HVAC Design and Operation (Code 60)**

Based on the ASHRAE book [HVAC Design Manual for Hospitals and Clinics](#), this seminar on June 25 introduces up-to-date healthcare design considerations and applications. The seminar covers Chapters 1–4, 6–11 and 13–16. Common medical terminology is introduced, and terminology differences between the medical and engineering fields are examined. Infection particles and their transport mechanisms are covered, followed by infection control methods. A major emphasis is placed on the necessary considerations for various diagnostic and treatment and support areas. The second half of the seminar focuses on air-distribution designs for surgical and patient rooms. Various control and energy efficiency techniques for cooling and heating plants are presented along with O&M and other commissioning topics. Smoke control and life safety best practices and application issues finish the seminar. [Read more](#)



# ASHRAE News



## Application of District Energy Principles for Enabling Energy and Exergy Efficiency, Conservation of Energy and Mass, and Promoting Safety and Hygiene in Multistory Potable-Water Systems

Learn about using in-suite, on-demand sub-stations to conserve energy and mass in domestic-water heating systems for two hotel projects by eliminating large volumes of heated potable water and associated recirculation lines. Systems were optimized to use the lowest-possible supply temperatures and largest differentials to enable energy efficiency while promoting safety and hygiene for the occupants.

Available now. Click [here](#) for more info.



## A Roadmap to Utilizing Temporary HVAC Systems for Improved Efficiency & Environmental Health

Complex projects coupled with tight labor markets and timelines have put additional pressure on contractors and business owners. The ability to integrate temporary HVAC systems into everyday practice proves more valuable than ever. This webinar will focus on the adoption of temporary HVAC systems and strategies resulting in improved efficiency and environmental health for commercial construction and new and existing mechanical services.

Available now. Click [here](#) for more info.

ASHRAE  
JOURNAL

2022 Supplier Webinar Series



DESIGN CONSIDERATIONS FOR  
DISTRICT ENERGY SYSTEMS

FOAMGLAS® JUNE 9 — 2PM EST

## Design Considerations for District Energy Systems

Presented by Owens Corning® FOAMGLAS® June 9 at 2 p.m. EST  
Viewing Available On-Demand After Live Broadcast

**Certificate of Attendance Offered**