



Shaping Tomorrow's Global
Built Environment Today

ASHRAE: Standards Developer and Technical Resource

**The Real Estate Roundtable
Sustainability Policy Advisory
Committee Meeting**

June 10, 2026



ASHRAE Overview

Mission

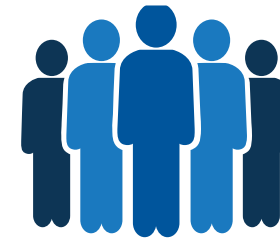
To serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields.

Vision

A healthy and sustainable built environment for all.

Industry Classification

Consulting Engineers | Contractors | Architects
Manufacturers/Manufacturing Representatives
Government | Health & Education | Design Build



55,000+ Members
130+ Countries



100+ Standards
and Guidelines

What We Do and How We Do It



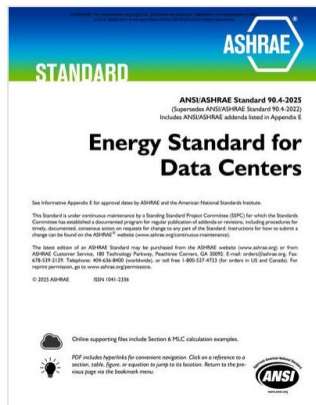
1. Serve as pipeline for providing technical information to members, chapters, companies and government officials
2. Develop standards and technical guidelines to improve the built environment
3. Offer continuing education for industry professionals
4. Serve as networking tool for industry professionals



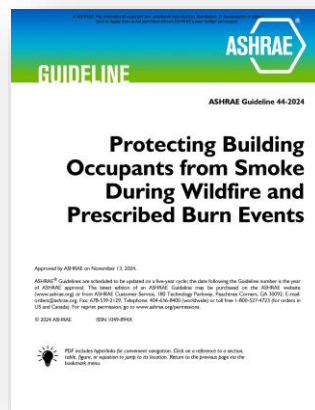
Well-Recognized Standards

- **ASHRAE Standard 15**, *Safety Standard for Refrigeration Systems and Designation and Classification of Refrigerants*
- **ASHRAE Standard 90.1**, *Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*
- **ASHRAE Standard 62.1**, *Ventilation for Acceptable Indoor Air Quality*
- **ASHRAE Standard 34**, *Designation and Safety Classification of Refrigerants*
- **ASHRAE Standard 55**, *Thermal Environmental Conditions for Human Occupancy*
- **ASHRAE Standard 188**, *Legionellosis: Risk Management for Building Water Systems*
- **2024 International Green Construction Code (IgCC)**: Powered by ASHRAE/ICC/USGBC/IES Standard 189.1-2023
- **ASHRAE Standard 241**, *Control of Infectious Aerosols*

New Edition



Wildfire Resource



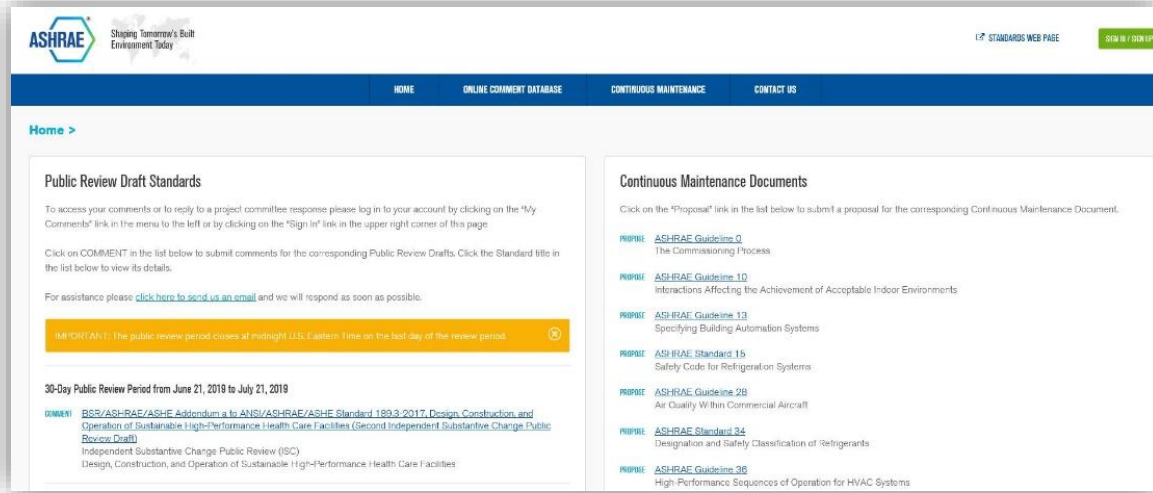
New Guideline



ashrae.org/bookstore



What is the Online Standards Review Database?



Updated and Improved

- Developing standards since 1922
- 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

[ashrae.org/standards](https://www.ashrae.org/standards)

The Online Standards Review Database allows access to public review drafts for standards, guidelines and addenda and to submit comments.

The system offers a dashboard which highlights items that require attention, provides quick links to individual and committee comments, continuous maintenance proposals and outstanding ballot results.

[ashrae.org/publicreviews](https://www.ashrae.org/publicreviews)



Resources



Shaping Tomorrow's Built Environment Today

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Series Overview

SERIES: School Indoor Air Quality Fact Sheets
This overview introduces the series and provides important background information.

School Indoor Air Quality Basics

In recent years, the COVID-19 pandemic and increased wildfire smoke events have heightened awareness around the critical need to improve indoor air quality (IAQ) in schools. Children are particularly vulnerable to poor IAQ due to their developing respiratory systems, higher respiratory rates relative to their body weight, and less efficient nasal filtering for larger particles during exercise. Despite challenges such as limited funding, high occupant densities, aging infrastructure, and staffing shortages, schools can implement a range of practical and scalable IAQ improvement strategies.

Indoor Air Quality Standards and Targets

While there is no nationally adopted IAQ performance standard, trusted organizations such as the CDC, the EPA, and ASHRAE issue guidance that addresses IAQ. The CDC recommends aiming for at least 5 equivalent air changes per hour (eACH) to reduce airborne viral particles. ASHRAE is a globally recognized organization known for establishing standards for building design and operation. The three ASHRAE documents most relevant to school IAQ are Standard 62.1, Standard 241, and Guideline 44.

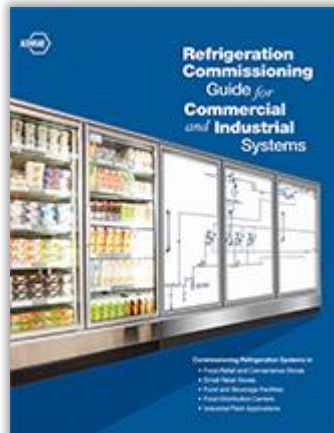
ASHRAE Standard 62.1 Ventilation and Acceptable Indoor Air Quality
ASHRAE Standard 62.1 establishes minimum targets for outdoor air and filtered/clean airflow in schools, for the purpose of achieving acceptable IAQ. These ventilation targets serve as a foundation that schools should aim to meet or exceed.

The minimum outdoor ventilation rate for classrooms is 15 cfm/person. Requirements for offices (17 cfm/person), cafeterias (9 cfm/person), and gyms (46 cfm/person) vary based on occupancy and activity levels.

ASHRAE Standard 241 Control of Infectious Aerosols
ASHRAE Standard 241 introduces an Infection Risk Management Mode (IRMM) designed for schools to implement during periods of elevated infection risk, such as pandemics (e.g., COVID-19) or seasonal endemics like influenza. New, occupancy-based clean airflow targets for the control of infectious aerosols are established.

For infection risk management, the minimum clean airflow rate for a classroom is 40 cfm/person, in offices (30 cfm/person), cafeterias (60 cfm/person), and gyms (80 cfm/person). Target clean airflow rates depend on occupancy and activity.

ASHRAE Guideline 44 Protecting Building Occupants From Smoke During Wildfire and Prescribed Burn Events
Guideline 44 recommends measures to minimize the impact of outdoor smoke on IAQ. It provides procedures for schools to follow during wildfire or prescribed burn smoke events, including recommendations for the building envelope, ventilation, and air cleaning systems. See the [Indoor Air Quality During Wildfires Fact Sheet](#) for more information on Guideline 44.



ASHRAE
JOURNAL Newsletter



Connecting Minds at ASHRAE Conferences

ASHRAE conferences are tailored to different needs within the HVAC&R and building systems industries. Conferences feature peer-reviewed papers and presentations, and attendees earn professional development hours (PDHs).



- **Winter & Annual Conferences:** ASHRAE major, flagship conferences on HVAC&R trends and research.
- **Topical Conferences:** In-depth focus on specialized industry topics.
- **Chapter Regional Conferences (CRCs):** Annual meetings hosted by ASHRAE's global regions, providing members a regional platform to learn and network.
- **Endorsed Conferences:** ASHRAE-supported events aligned with the Society's mission.



Showcasing Innovation at Leading Industry Tradeshows

ASHRAE is a prominent advocate and participant in industry events and tradeshows. The Society's participation in these events signifies its commitment to fostering innovation and collaboration with leading industry organizations.



ASHRAE Journal



ASHRAE's official monthly publication

Provides detailed insight on the latest HVACR technologies and applications for consulting engineers and professionals in the industry.

Articles are peer-reviewed and focus on technical topics, including green buildings, decarbonization, indoor air quality, energy management, thermal storage and alternative refrigerants.



Discussions with leading ASHRAE experts to expand knowledge in the HVACR industry.



Brief talks with ASHRAE Journal authors on HVACR content published in the Journal.

ashrae.org/ashraejournal



ASHRAE Handbook

ASHRAE Handbook – Print Version

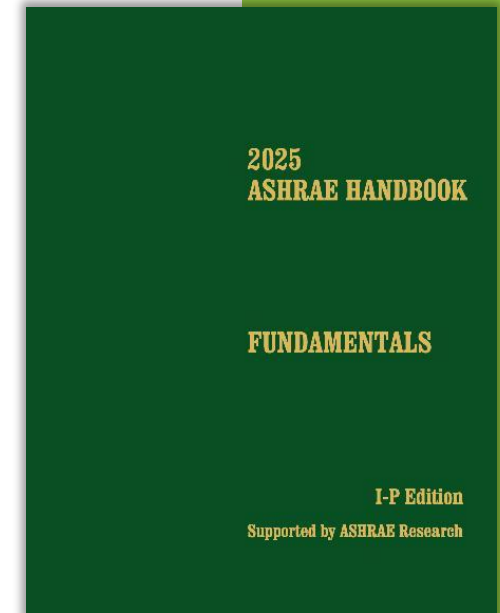
- Continuously refined and updated, ASHRAE has published its Handbook series since 1920s
- Volumes cover HVAC&R fundamentals, systems, equipment and a wide variety of applications
- Handbooks are also available in the ASHRAE Technology Portal

ASHRAE Handbook Online

- Mobile device responsive
- Content from all four current Handbook volumes plus extra features such as videos, animations, spreadsheets and more
- Easier than ever to search across all volumes, print, ask questions about technical content, access bonus features and look up new terminology
- Eligible ASHRAE members can choose an ASHRAE Handbook Online subscription at a discounted rate during membership renewal

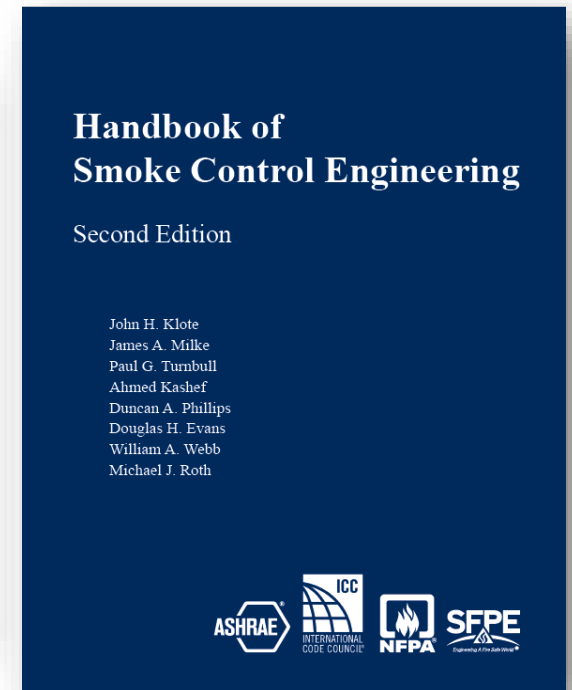
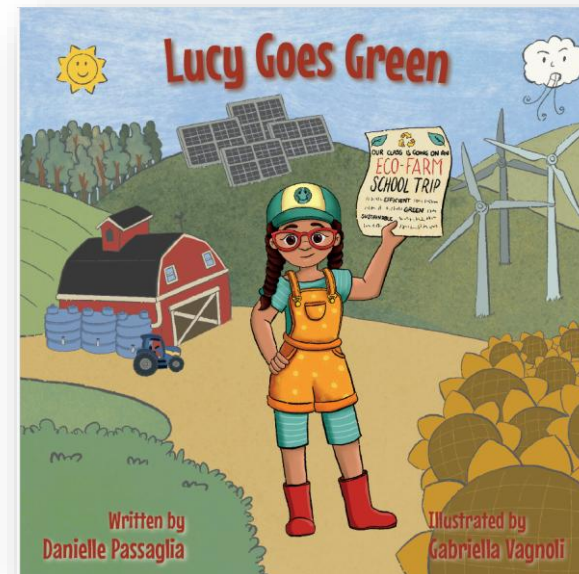
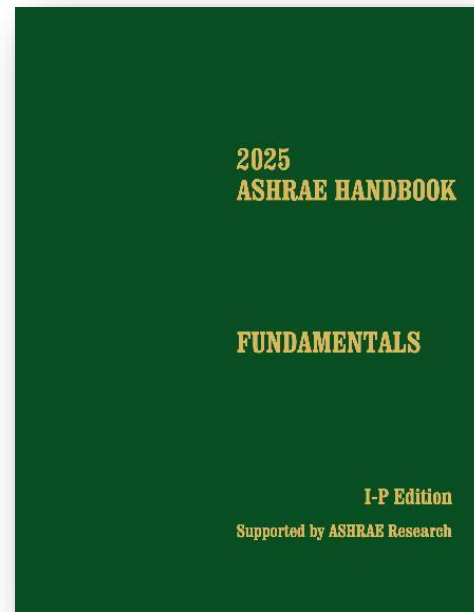


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ASHRAE offers a wide range of professional development opportunities to ensure that professionals remain at the forefront of industry advancements and best practices.

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In-person and group training for companies and Chapters is available.

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Over 90 eLearning courses available

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Instructor-Led Training



HVAC Design and Operation Training

ASHRAE Learning Institute offers intensive HVAC Design and Operation training sessions that fill the need to improve overall building performance.

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Two online courses to be offered alongside the Sixth International Conference on Efficient Building Design, Beirut, Lebanon | October 3-4, 2024

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ASHRAE Global Training

Instructor-led training tailored to participants from the Middle East, Africa and Parts of Asia.

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Instructor-Led Training

ASHRAE Learning Institute (ALI) offers a wide range of professional development seminars and short courses. ALI training provides high-quality, technical information.

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Company or Chapter Training

ALI offers training that help companies and Chapters close the gap between entry level engineers and seasoned practitioners.

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Certification

7 Certifications



Shaping Policy with ASHRAE Government Affairs

The mission of ASHRAE's Government Affairs office is to establish ASHRAE as a leading source for expertise in the built environment and a resource for policy-makers in the development of legislation and regulations affecting the public, the HVAC&R community, and the engineering profession.

Stay Informed with our bi-weekly Government Affairs Update.

Sign up online ashrae.org/newsletters or email GovAffairs@ashrae.org

Government Outreach Events connect ASHRAE volunteers with elected officials, government agencies, and aligned organizations.

ASHRAE's Public Policy Priorities:

- Support Sustainable Building Practices including Building Decarbonization to Mitigate Climate Change
- Promote Healthy Buildings and Reduce Indoor Environmental Risks
- Advance Design and Construction of Resilient Buildings and Communities
- Ensure the Orderly and Safe Phasedown of High-GWP HFC Refrigerants
- Support Adoption of the Latest Edition of ASHRAE's Energy Standards into Building Codes
- Strengthen and Increase Diversity in the HVACR Workforce

ashrae.org/government-affairs



Thank you.

Alice Yates
Managing Director of Government Affairs

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