



Shaping Tomorrow's
Built Environment Today

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2024-2025 ASHRAE President

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February 5, 2025

The Honorable Ghazala F. Hashmi
Chair
Education and Health Committee
Virginia Senate
201 North 9th Street
Richmond, VA 23219

Sent via email to: senatorhashmi@senate.virginia.gov

Re: HB 2618, "Indoor Air Quality Standards"

Dear Chair Hashmi and Committee Members:

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 54,000 members, including over 1,100 in Virginia, 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.

We appreciate the amendment to this bill that would require that school ventilation systems operate in accordance with the "most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers." We suggest further strengthening HB 2618 by specifically referencing the relevant standards: ANSI/ASHRAE Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*; ASHRAE Standard 241-2023, *Control of Infectious Aerosols*; and ANSI/ASHRAE Standard 188-2021, *Legionellosis: Risk Management for Building Water Systems*.

Indoor air quality (IAQ) can significantly affect student learning and development, and the COVID-19 pandemic increased awareness of the impacts of IAQ on student health.¹ Adhering to the appropriate standards and guidance is essential to managing indoor air quality. ASHRAE

¹ Managing Air Quality During the Pandemic: How K-12 Schools Addressed Air Quality in the Second Year of COVID19, ASHRAE and USGBC Center for Green Schools, May 2022:
https://www.ashrae.org/file%20library/technical%20resources/covid19/managing_air_quality_during_the_pandemic.pdf



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Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*, specifies minimum ventilation rates and other measures intended to provide indoor air quality that is acceptable to human occupants and minimizes adverse health effects that are due to poor indoor air quality. It defines the requirements for ventilation and air-cleaning system design, installation, commissioning, and operations and maintenance. This latest edition (2022) of Standard 62.1 includes updates to the procedures and methods for meeting minimum ventilation and indoor air quality requirements, and improvements to the Indoor Air Quality Procedure (IAQP.)

ASHRAE has also developed Standard 241-2023, *Control of Infectious Aerosols*, a standard for buildings that is focused on airborne infection risk mitigation. It establishes minimum requirements for building owners, operators and professionals to improve IAQ by reducing the risk of airborne disease transmission by infectious aerosols. Standard 241 is meant to be applied in periods of elevated risk, for example the risk of transmission of pathogens like COVID-19. Under these conditions, buildings would operate in "Infection Risk Management Mode," and building operators would have the flexibility to choose between different equivalent clean air options based on what they determine is appropriate for that type of space, along with their specific energy use goals or cost restrictions. This flexibility makes Standard 241 a powerful tool for mitigating transmission risk that can be adapted for use in different types of buildings.

We also appreciate the inclusion of plumbing systems in the list of building systems that would be required to undergo inspection and evaluation. ASHRAE Standard 188-2021, *Legionellosis: Risk Management for Building Water Systems*, was created to address the risks of Legionnaires' disease and help create and implement water management plans for buildings. Standard 188 is written to be usable by a broad range of building owners. It contains extensive input from industry, academia, and healthcare and from city, state, and national public health departments and regulatory authorities.

In summary, we support HB 2618's goal of improving indoor air quality in schools, and recommend that this can be done most effectively by referencing ASHRAE Standards 62.1, 241, and 188 in the bill.

If you have any questions or need additional information, please do not hesitate to contact me or have your staff email GovAffairs@ashrae.org. Thank you for your consideration of this important matter and for working to ensure the health and well-being of building occupants.

Sincerely,

A handwritten signature in blue ink that reads "M. Dennis Knight".

M. Dennis Knight
2024-2025 ASHRAE President