

# HB2618/SB1413

Public school buildings; indoor air quality, inspection and evaluation.



Bill Patron: Delegate Dan I. Helmer (10<sup>th</sup> House District) and Senator Scott A. Surovell (34<sup>th</sup> Senate District)

## What the Bill Does:

Establishes several enumerated requirements for local school divisions to ensure indoor air quality in each public school building in the local school division, including providing for an industry-recognized uniform inspection and evaluation of the heating, ventilation, and air conditioning **at least once every four years**. The inspection and evaluation shall be performed by a certified testing, adjusting, and balancing technician, an industrial hygienist certified by the American Board of Industrial Hygiene, a technician with a Master HVAC License from the Department of Professional and Occupational Regulation, or a mechanical engineer.

## Why Does This Matter?

There are multiple, specific requirements outlined in this legislation that will require local school boards' planning, notification, remediation, record-keeping, compliance, and regular ongoing maintenance of HVAC systems. This proactive oversight helps reduce pollutants, improve ventilation, and support students' learning environments. School divisions may already have established indoor air quality plans and procedures for addressing issues related to indoor air quality, while many may not.

## How Does This Impact Students?

There may be improved indoor air quality in schools which can significantly enhance student learning by boosting cognitive function, academic performance, and classroom engagement while also reducing absenteeism and promoting long-term health benefits. Clean air is linked to improved memory, problem-solving skills, and attention span meaning students can focus better during lessons, leading to more effective learning and information retention.

Studies have also shown a strong correlation between better indoor air quality and higher scores on standardized tests and increased efficiency in completing tasks. For example, research suggests that increased ventilation rates can lead to [noticeable increases in mathematics and reading scores](#).

## How Does This Impact School Divisions?

- Local divisions must conduct an industry-recognized inspection and evaluation **at least every four years** of the heating, ventilation, and air conditioning systems that includes:
  - Testing for maximum filter efficiency;
  - Physical measurements of outside air delivery rate;
  - Verification of the appropriate condition and operation of ventilation components;
  - Measurement of air distribution system outside air, return air, and supply air and static pressure readings across all air handling unit components, including filters, coils, and fans;

- Verification of unit operation and that required maintenance has been performed in accordance with the most recent indoor ventilation standards promulgated by the American Society of Heating, Refrigerating and Air-Conditioning Engineers;
- Verification of carbon dioxide sensors and acceptable carbon dioxide concentrations indoors; and
- Collection of field data for the installation of mechanical ventilation if none exists.
- If not already done, school divisions will need to prepare a plan and include the cost of this additional testing in their annual budgets. Divisions may need to hire needed consultants to meet the requirements of this bill.
- School divisions will need to ensure that staff that are properly trained and certified to lead the effort to meet the requirements of this bill, create a team that monitors the HVAC IAQ program, schedule of inspection, remedial action, if any, that may be needed in response to the findings of the tests.
- Each local school division must prepare a written report of the results of the uniform inspection and evaluation that includes any corrective actions necessary to be performed on the mechanical ventilation system or the heating, ventilation, and air conditioning infrastructure, including installation of filters meeting the most optimal level of filtration available for a given heating, ventilation, and air conditioning system, installation of carbon dioxide sensors, and additional maintenance, repairs, upgrades, or replacement.
- Each local school division shall make such report available for public inspection at a regularly scheduled local school board meeting and on the local school board's public website.

## What Resources Are Available?

- Associated Air Balance Council, AABC, <https://www.aabc.com/>
- National Environmental Balancing Bureau, NEBB, <https://www.nebb.org/>
- National Air Duct Cleaners Association, NADCA, <https://nadca.com/>
- Testing, Adjusting and Balancing Bureau, TABB, <https://www.tabbcertified.org/>
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers, ASHRAE, <https://www.ashrae.org/>
- American National Standards Institute, ANSI, <https://www.ansi.org/>
- Environmental Protection Agency (EPA), Indoor Air Quality (IAQ), <https://www.epa.gov/indoor-air-quality-iaq>; [Indoor Pollutants and Sources](#), EPA: [Indoor Pollutants and Sources](#) ; EPA: [Office Equipment: Design, Indoor Air Emissions, and Pollution Prevention Opportunities](#)
- U.S. Environmental Protection Agency. Unfinished business: a comparative assessment of environmental problems, EPA-230/2-87-025a-e (NTIS PB88-127030). Office of Policy, Planning and Evaluation, Washington, DC, 1987. [EPA: Unfinished Business](#)
- ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality, ASHRAE, Inc., Atlanta, GA. [ANSI/ASHRAE Standard 62.1](#)
- NFPA 72, National Fire Alarm Signaling Code. 2025. [NFPA 72](#)
- NFPA 101, Life Safety Code. 2024. [NFPA 101, NFPA Journal - Carbon monoxide requirements in the Life Safety Code](#)
- United States Green Building Council (USGBC), Leadership in Energy Efficient Design for Building Design and Construction (LEED BD+C), Indoor air quality assessment v4 - LEED v4, [USGBC LEED BD+C IAQ assessment](#)
- United States Green Building Council (USGBC), Leadership in Energy Efficient Design for Existing Buildings (LEED O+M), Minimum Indoor Air Quality v4.1 - LEED v4.1, [USGBC LEED O+M Minimum IAQ](#)

- Oaks, L. (2020, October 7). *LEED and indoor air quality for existing buildings: U.S. Green Building Council*. USGBC. <https://www.usgbc.org/articles/leed-and-indoor-air-quality-existing-buildings>
- Virginia Uniform Statewide Building Code [USBC](#)
- Guidelines for School Facilities in Virginia’s Public Schools [Guidelines for School Facilities](#)

## What Additional Items Will Be Released?

- The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) and other professional organizations are investigating how to reduce outside air with the use of filters to improve the indoor air quality thereby reducing energy use. They are also investigating the possibility of placing a building in “unoccupied mode” when the building is unoccupied and shutting the outside air units for energy conservation. No date has been set as to when any guidelines will be issued.

## School Division Next Steps:

- Assign trained maintenance and operations staff to conduct detailed, preliminary evaluations and assessments of all the school buildings to set up a base standard and identify any building with existing IAQ problems.
- Explore potential methods to gather baseline data on current indoor air quality conditions.
- Follow up with a detailed inspection of their HVAC systems by qualified professionals documenting all testing and remedial steps taken to meet IAQ recommendations.
- Develop in indoor air quality assessment to be conducted no less than every four years.
- Research options and prepare for the use of an industry-recognized inspection and evaluation at least every four years.

## Who is the VDOE Contact:

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