Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

WASHINGTON STATE BOARD OF HEALTH

WASHINGTON STATE BOARD OF HEALTH

This report was prepared by the State Board of Health

Andrew Kamali, Project Manager
Nina Helpling, Policy Advisor
Mary Baechler, Community Engagement Coordinator
Marcus DeHart, Communications Consultant
Crystal Ogle, Administrative Assistant

Acknowledgments

Technical Advisory Committee Members and Alternates

Patty Hayes
Chair
Washington State Board of Health

Tammy Allison
Board Director–Region 121
Washington Association of School Business Officials

Susan Baird-Joshi
Volunteer
Washington State PTA

Jamie Bodden
Managing Director
Washington State Association of Local Public Health Officials

Brian Buck
Executive Director of Support Services
Lake Washington School District

Richard Conley
Consultant
The Rural Alliance

Jake Cook
Public Advocate

Kelly Cooper
Director, Policy and Legislative Relations
Washington State Department of Health

Nicole Daltoso
Senior Director of Capital Facilities
Evergreen Public Schools

Theodore Dehnke
Assistant Director of Maintenance
Evergreen Public Schools

Becky Doughty
Executive Director, Operations
Spokane Public Schools

Kate Espy
Board Member and Legislative Representative
South Kitsap School District

Samantha Fogg
Co-President Seattle Council PTSA
Seattle Council PTSA

Brian Freeman
Superintendent
Inchelium School District

Kelsey Greenough
Records Specialist
Richland School District

David Hammond
School Construction Committee Chair
Washington Association of School Administrators

Suzie Hanson
Executive Director
Washington Federation of Independent Schools

Erin Hockaday
Senior Manager, Surveillance & Investigation
Benton-Franklin Health District

Kevin Jacka
Executive Director
The Rural Alliance

Sandra Jarrad
Chief Communications Officer
South Kitsap School District

Lauren Jenks
Assistant Secretary, Environmental Public Health
Washington State Department of Health

Kenny Johnson
Director of Maintenance & Operations
Lake Washington School District

Devon Kellogg
Volunteer, Advocacy Committee
Washington State PTA

Kellie Lacey
Assistant Director of Human Resource
Richland School District

Geoff Lawson
Operations Coordinator
Washington Association of Maintenance and Operation Administrators & Tacoma School District

Anders Lindgren
President
SchoolOps

Steve Main
Division Director, School Safety Lead
Spokane Regional Health District

Jared Mason-Gere
Government Relations Staff
Washington Education Association

Eric Meyer
Division Director, School Safety Lead
Spokane Regional Health District

Acknowledgments

Tyler Muench
Director of Advocacy & External Affairs
Washington State Office of Superintendent of Public Instruction

Randy Newman
Director of School Facilities & Organization
Washington State Office of Superintendent of Public Instruction

Laura Peterson
Volunteer/Appointed Role
Washington State PTA

Sandy Phillips
School Health and Safety Program Technical Advisor
Spokane Regional Health District

Morgan Powell
High Performance School Coordinator
Washington State Office of Superintendent of Public Instruction

Laurette Rasmussen
School EH Specialist
Whatcom County Health & Community Services

Sharon Ricci
Community Relations
Washington Federation of Independent Schools

Doug Rich
Superintendent
Washington State Catholic Conference

Nicole Roel
Board of Directors, Olympia ESD 114
Washington Association of School Business Officials

Jeff Rogers
Manager of Environmental Health & Safety
Washington Association of Maintenance and Operation Administrators & Tacoma School District

Julie Salvi
Lobbyist/Government Relations
Washington Education Association

Jessica Sankey
Chief Operations Officer
Bellingham Public Schools

Pam Schwartz
Assistant Superintendent
Washington State Catholic Conference

Preet Singh
Director of Health Services
Bellingham Public Schools

Bailey Stanger
Environmental Health Specialist
Benton-Franklin Health District

Dan Steele
Assistant Executive Director, Government Relations
Washington Association of School Administrators

Roz Thompson
Director of Government Relations
Association of Washington School Principals

Brook Wilkerson
Director of Operational Supports
SchoolOps

Gina Yonts
Associate Director
Association of Washington School Principals

Acknowledgments

Department of Health Advisors

Juan Gamez
School Environmental Health and Safety
Office of Environmental Health and Safety

Kara Ziegler
Environmental Health Planner
Office of Environmental Health and Safety

Alexandra Boris
Public Health Advisor
Office of Environmental Health and Safety

Scott Reynolds
Public Health Advisor
Office of Environmental Health and Safety

Rebecca Doe
Epidemiologist
OHS – DCHS – Communicable Disease EPI

University of Washington Research Team

The Board would like to acknowledge the research support provided by the follow University of Washington students who researched and reported on *Population-Based Health in Community Practice*.

Michaela Billings, Jamie Black-Lewis, Cami Burnham, Ariel Cronin, Djenaba Ndiaye, Grant Olson, Aaron Warnock

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

STATE OF WASHINGTON
WASHINGTON STATE BOARD OF HEALTH
PO Box 47990 • Olympia, Washington 98504-7990

Dear Governor Ferguson and Committees of the Legislature,

On behalf of the Washington State Board of Health (Board), I am pleased to present the School Environmental Health and Safety Rule Review report and the new proposed rule. This report is a culmination of a rigorous process conducted in collaboration with our multi-disciplinary technical advisory committee, the Department of Health (Department), the Office of the Superintendent for Public Instruction (OSPI), and local health jurisdictions (LHJs).

This report details the committee's comprehensive review of the state's outdated school environmental health and safety rule. It highlights key issues identified during the development of a new set of minimum public health and safety standards. It candidly discusses challenges that emerged, including some outside the direct scope of the Board's authority and the proposed rule. Our goal is to ensure that you and the Legislature are fully apprised of the committee's recommendations and the complexities we encountered.

Throughout the process of developing the proposed rule, the Board conducted significant outreach to communities, particularly those identified as overburdened. The TAC carefully considered the feedback that we received from the community, and where appropriate, integrated it into the proposed rule.

Full implementation of the proposed rule will require funding for both schools and LHJs to ensure they are able to comply with the minimum health and safety standards. The report's recommendations emphasize priority areas for health and safety improvements that are implemented over three phases to help schools and LHJs prepare and mitigate larger fiscal impacts. We developed this balanced approach to maximize student safety while remaining fiscally responsible.

I look forward to discussing the report and the path forward. Your insights and support are vital as we strive to create safer and healthier educational environments for all Washington students.

Thank you for your continued commitment to the wellbeing of our state's schools and communities.

Sincerely,

Patty Hayes

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Executive Summary

During the 2024 legislative session, the Legislature included a proviso in the operating budget that required the Washington State Board of Health (Board) to convene a multi-disciplinary Technical Advisory Committee to develop a proposed set of minimum environmental health and safety standards for schools, a fiscal analysis, and recommendations for a phased implementation. The Legislature also directed the Department of Health (Department) to complete an environmental justice assessment (EJA) on the proposed rule.

The Board, in collaboration with the Department, Office of Superintendent of Public Instruction (OSPI), and the committee completed a comprehensive review of the existing and delayed school environmental health and safety rules (Chapters 246-366 and 366A WAC) and proposed a new chapter (246-370 WAC) to establish modern, statewide minimum standards for K-12 school facilities. The Department completed an EJA, which evaluated the proposed rule's impacts on overburdened and vulnerable communities, tribes, and populations experiencing environmental health inequities. The assessment concluded that strengthening requirements for indoor air quality, water quality, injury prevention, chemical storage, extreme temperatures, and safe playground design will yield substantial benefits. The assessment estimates the new measures will protect approximately 1.1 million K-12 students across 2,783 public, private, and charter schools by reducing exposure to asthma triggers, respiratory pathogens, and environmental toxins. The assessment also aided in ensuring meaningful community involvement throughout rule development.

The current environmental health and safety rules are over 50 years old. Proposed chapter 246-370 WAC provides updated definitions, site assessment protocols, construction plan reviews for new or altered facilities, routine health inspections every three years (with risk-based flexibility), and explicit direction for emergency hazards and variances. Notably, the proposed rule introduces new requirements focused on comprehensive indoor air quality, indoor temperature limits, and specialized room specifications including health rooms. The committee's recommendations are intentionally designed to allow for flexibility while maintaining accountability for schools and local health jurisdictions. A detailed fiscal analysis estimates initial and ongoing costs to schools, local health jurisdictions, and state agencies. To help ease financial impacts and implementation challenges, the Department will develop templates and comprehensive guidance documents for required plans.

The committee recommends a phased approach to rule implementation to reduce burden and facilitate equitable and sustainable application of the rule across the state. The first phase of rule implementation will focus on initial planning and plan development and prioritizes rule sections with minimal operational change. The second phase incorporates collaborative inspections and assessments involving school officials and local health jurisdictions. The final phase adds new requirements, such as temperature ranges and specialized room standards. Priority rankings guide resource allocation toward highest-impact provisions, such as chemical safety, injury prevention, playground safety, and indoor air quality. The report highlights challenges in aligning health and safety requirements with energy-efficiency mandates, uneven program capacity and funding across jurisdictions, and the acute needs of private schools, rural, and small districts lacking capital resources or specialized staff. Addressing these concerns will require targeted funding, technical assistance, and interagency coordination to ensure all Washington communities benefit from safer, healthier learning environments.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Background

School Environmental Health and Safety Review

Under state law, the Washington State Board of Health (Board) has broad authority to develop public health rules to protect and improve the health of people in Washington state. Rules adopted by the Board are implemented by the Department of Health (Department) and local health jurisdictions.

Chapter 246-366[1] of the Washington Administrative Code (WAC) sets the current standards for regulating K-12 school environmental health and safety for over 1.1 million students. However, these standards are over 50 years old and outdated. In 2004, the Board began rulemaking to update these rules and in 2009 adopted chapter 246-366A[2] WAC Environmental Health and Safety Standards for Primary and Secondary Schools.

In 2010, the Legislature included the following proviso in the operating budget.

“The department of health and the state board of health shall not implement any new or amended rules pertaining to primary and secondary school facilities until the rules and a final cost estimate have been presented to the legislature, and the legislature has formally funded implementation of the rules through the omnibus appropriations act or by statute.”

Each budget since 2010 has retained the proviso, and in response, the Board has continued to extend the effective date of Chapter 246-366A WAC.

Because the Board never implemented Chapter 246-366A WAC, schools and local health jurisdictions remain subject to chapter 246-366 WAC. The 2009 rule (246-366A) includes plan review and periodic inspections, minimum building standards intended to prevent injury and the spread of communicable disease, and controls for sound, lighting, and room temperature. The rule addresses some student health and safety issues such as fall protection and chemical safety. While other rules address aspects of the health and safety that have an impact on school facilities, the Board’s rule focuses on the health and safety of K-12 students.

Disparities in funding and infrastructure for school and local health jurisdictions prevent the implementation of Chapter 246-366 WAC uniformly across the state. However, all schools across the state receive food safety inspections and responses to complaints from their local health jurisdiction, but due to differing funding models, some of these services have fiscal impacts or fees associated with them.

[1] https://apps.leg.wa.gov/WAC/default.aspx?cite=246-366
[2] https://apps.leg.wa.gov/wac/default.aspx?cite=246-366A

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

During the 2024 legislative session, the Legislature directed the Board to review chapter 246-366 and 246-366A WACs.[3] They directed the Board to propose updated environmental health and safety standards for K-12 schools in Washington state. Specifically, they required the Board to:

- Convene a technical advisory committee (TAC) consisting of various school associations, school districts, and OSPI to propose minimum statewide health and safety standards
- Collaborate with OSPI to develop a fiscal analysis for implementing the rules
- Assist the Department in completing an environmental justice assessment[4] on any proposed rules
- Work with the Department, OSPI, the TAC, and local health jurisdictions to provide a report to the Office of the Governor and appropriate committees of the Legislature by June 30, 2025, detailing the prioritized sections or subject matter focused on the greatest health and safety for students and the order in which they must be implemented

In convening the TAC, the Board included more members than outlined in the proviso to ensure that all voices were heard. Historically, private schools, charter schools, and rural schools have been left out of the conversation, additionally, the Board wanted to ensure geographic and demographic variation to establish a rule that considers all sectors of the State.

The Board's Timeline

Date	Milestone/Action	Purpose
May 2024	Invite TAC members	In addition to the required members, the Board included additional members such as Parent-Teacher Organizations, Teachers Unions, Students, and Private Schools.
June 20, 2024	Filed CR-101 pre-proposal statement of inquiry	The Board filed WSR 24-13-1175 with the Code Reviser to announce the intent to create rule language.
Aug 2024 – May 2024	TAC meetings	The Board Chair and staff worked with TAC members to draft rule language and discuss implementation.
Dec 2024 – Mar 2025	Listening sessions	Board staff hosted virtual and in-person meetings to discuss the preliminary draft language and collected feedback about the finalized draft rule language. These meetings were held across Washington state.

[3] https://fiscal.wa.gov/statebudgets/2024proposals/Documents/co/5950-S.SL.pdf
[4] https://doh.wa.gov/community-and-environment/health-equity/environmental-justice/assessments
[5] https://sboh.wa.gov/sites/default/files/2024-06/WSR 24-13-117.pdf

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Date	Milestone/Action	Purpose
Dec 2024 – Feb 2025	Informal comment period	The Board staff invited all interested parties to review and share feedback on the draft rule language.
March 12, 2025	Preliminary review by the Board	Board Members reviewed the draft proposed rule language, Environmental Justice Assessment, and Fiscal Analysis.
April 9, 2025	TAC provides recommendations to the Board	TAC members provided comments and made recommendations to the Board at a joint meeting.
April 2025	Final draft proposal	Board staff finalized required products based on Board direction.
June 4, 2025	Board approves report	The Board approved the final draft rule documents and recommendations.
June 30, 2025	Report to the Governor and Legislature	The Board will submit the final draft rule language, Environmental Justice Assessment, and Fiscal Analysis to the Governor's office and legislative committees.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Environmental Justice Assessment Summary

Washington State Department of Health
Washington State Board of Health

Purpose

The 2024 – 2025 School Rule Review project[1] involves a significant agency action to propose a new school environmental health and safety rule. The 2024 Legislature budget proviso[2] directed the State Board of Health (Board) to draft the proposed rule and directed them to collaborate with the Department of Health (Department) in completing the Environmental Justice Assessment (assessment). The Department and the Board prepared this assessment, which discusses the State Board of Health rule proposal.[3,4]

Washington law[5] requires an environmental justice assessment to evaluate potential environmental benefits and harms associated with significant agency actions. An assessment provides opportunities for meaningful participation for impacted communities and Washington Tribes, reduces environmental health disparities, and distributes environmental benefits equitably.

Background Information

The current rules under chapter 246-366 of the Washington Administrative Code (WAC) set the standards for school environmental health and safety for 1.1 million Washington State students. The Board established these rules more than 50 years ago. In 2024, the Legislature's budget proviso directed the Board to review current rules and develop an updated rule to set minimum health and safety standards for K-12 schools. The proviso also requires that the Board works with the Department to complete an Environmental Justice Assessment.

The proposed rule will affect school staff, visitors, K-12 students, and Pre-K students in public, private, and charter schools in Washington state. Pre-K sites that may be attached to schools include HeadStart, Early Childhood Education and Assistance Program, and Transition to Kindergarten. The Department of Children, Youths, and Families (DCYF) typically covers these programs, but this chapter applies to programs located inside a school facility, that are not licensed by DCYF. Younger children are especially vulnerable to environmental exposures and this assessment includes them in vulnerable populations.

[1] 2024-2025 School Rule Review Project | SBOH
[2] 5950-S.SL.pdf
[3] About Us | SBOH
[4] Chapter 43.20 RCW: STATE BOARD OF HEALTH
[5] Chapter 70A.02 RCW: ENVIRONMENTAL JUSTICE

The Department will issue guidance based on this rulemaking to assist schools and districts with implementation, including best practices for recommended actions and requirements. This rule covers a broad range of school safety topics, including air quality standards, new construction inspections, classroom temperature, chemical storage, playground safety, imminent health hazards and specialized rooms.

Board staff, in collaboration with the TAC, reviewed but did not include other aspects of school environmental health and safety covered by other state or federal laws and rules, including drinking water regulations[6], lead in school drinking water[7] and PFAS[8,9], many of these items are included in the applicability section of the rule. Examples of areas not covered under this rule include safety drills, support services, curriculum and vaccinations.

Section One: Analyze Environmental Benefits and Harms

The intent of this section of the assessment is to identify likely environmental benefits, likely environmental harms, associated positive health impacts and associated negative health impacts for overburdened communities, vulnerable populations, and Tribes associated with the planned action.

Establishing baseline requirements for all schools should generally improve environmental health conditions as it codifies areas of concern that are not currently standardized. Benefits include, but are not limited to, reduced exposure to asthma triggers, respiratory pathogens, and environmental toxins. Specific areas that have positive health impacts include strengthened requirements for indoor air quality, water quality, safe indoor temperature limits, injury prevention, specialized rooms, chemical storage, and safe playgrounds. The assessment found no likely environmental harms or negative health impacts directly associated with this action.

Section Two: Identify Overburdened Communities and Vulnerable Populations

The intent of this section of the assessment is to identify geographic areas, overburdened communities, and vulnerable populations where environmental and health impacts may result from the agency's actions.

The scope of this rule is statewide, affecting over 1.1 million K-12 students in Washington state, and the teachers, staff, and visitors in those schools. The assessment includes maps showing statewide locations and concentrations of unhealthy air days, extreme weather days, overburdened communities and vulnerable populations, and rates of students receiving free or reduced-price lunch benefits. All community listening sessions took place in overburdened communities and vulnerable population areas.

[6] RCW 43.20.025: Definitions.
[7] RCW 28A.210.410: Lead contamination at drinking water outlets.
[8] 2414016SALandMCLdrinkingwaterCR103Ecombined.pdf
[9] PFAS in Drinking Water—Group A Public Water System Support | Washington State Department of Health

Section Three: Tribal Engagement and Consultation

The intent of this section is to describe the Board's engagement and collaboration with Tribes, how information received from Tribes and Tribal organizations informed decision making for this rule-making process and plans for ongoing or future Tribal consultation after publication of the EJ Assessment.

On July 11, 2024, the Board sent a Dear Tribal Leader Letter to the Federally Recognized Tribes of Washington state to provide notice of the upcoming rulemaking, offer consultation, and inform Tribal Leaders of a listening session scheduled for July 22, 2024. The proposed rule does not affect state Tribal educational compact schools; however, many Tribal children attend public, private, or charter schools. Tribal perspectives help ensure that the proposed rule is equitable, represents all Washingtonians, and reflects the Washington state commitment to honoring Tribal sovereignty.

The Board engaged and continues to engage with Tribes in 2024 and 2025 for the School Rules Review project. Tribal engagement included two listening sessions, Dear Tribal Leader Letters sent to Tribal Chairs, tabling at Tribal community events, one-on-one conversations with Tribal members, and calls and emails to Tribal Health and Education Directors to invite them to the listening sessions.

Tribal rights are not directly impacted by this rule. Actions taken by the state of Washington may not impinge upon Tribal sovereignty or reserved treaty rights. The government-to-government relationship between the state of Washington and the Tribal nations requires that state agencies have meaningful consultation with the Washington Tribes[10] during the process of significant agency actions or the development of policies and program implementation. The rule does not have an impact on Tribal resources.

Tribal compact schools and Bureau of Indian Education schools may choose to implement some or all the standards from the new rule and have access to the Department guidance documents that accompany the rule. School environments may affect Tribal children more due to health, income, and food access disparities. Tribal children attending public or private schools may be in areas with the highest adverse environmental impacts, such as high temperature days, wildfire smoke events, and poor air quality days.

This rule is most likely to have an impact based on increased minimum environmental health and safety standards for all children in Washington state attending public, private, or charter schools. As many Tribal children attend public or private schools, implementation of these standards will benefit some Tribal children.

Board staff received questions about public schools owned and operated by Tribes on reservation land. The rule's prohibition of products with fragrances triggered a question in relation to cultural practices such as smudging. Board staff made a commitment to attendees to address these issues in Department guidance and best practices for implementing the proposed rule.

[10] RCW 70A.02.100: Tribal consultation.

The Board has a duty to collaborate with Tribes in the development of policies, to inform them of updates to this work, and to provide formal consultation if requested. Ongoing engagement will continue as the rule moves through the different stages of development.

Section Four*:* Community Engagement Summary

The intent of this section is to summarize the Board's community engagement strategy and work.

In 2024 and 2025, Board staff held three online listening sessions and six in-person listening sessions. Board staff connected with nine educational service districts, 24 school districts, 364 schools, and 198,232 student families via school and district-level flyers. Board staff engaged with organizations that serve people who identify as Latino, Black, Indigenous, and People of Color (BIPOC), LGBTQ+, and people with disabilities. Board staff contacted local and statewide community-based organizations by phone calls, email, and Facebook groups. The Board is committed to ongoing community engagement and will continue outreach to affected communities throughout the rulemaking process.

The Board received 79 unique informal comments and presented them to the technical advisory committee for review and consideration. Board staff engaged 53 participants in the in-person listening sessions and 171 participants in the virtual listening sessions. Concerns raised by participants included air quality, vaping, wildfire smoke, illness in schools, cost of implementation, wildfires, extreme temperatures, safe drinking water, and pest management.

The committee reviewed a summary of public comments and had access to the verbatim comments. Committee members considered the scope of the rule revision, the variety of school facilities, the funding available, and the potential impact on overburdened communities and vulnerable populations.

Ongoing engagement will continue as the rule moves through the different stages of development. The Board continues to communicate with interested parties, school districts, and local health jurisdictions. The Legislature will determine the timeline to adopt and implement the proposed rule. As the proposed rule is scheduled for adoption, the Board will gather comments on rule language from interested parties, publish rule materials on the website, and possibly schedule listening sessions leading up to filing the rule for adoption.

Section Five: Strategies to Address Environmental Harms and Equitably Distribute Environmental Benefits

The final section of the assessment evaluates strategies to eliminate, reduce, or mitigate environmental harms and ensure equitable access to the environmental benefits. The strategies this rule will address include:

- Providing equitable participation and meaningful engagement with overburdened communities and vulnerable populations (OCVPs) in the development of the rule.
- Prioritizing equitable distribution of resources and benefits to OCVPs.
- Modifying substantive regulatory or policy requirements.

Board staff included a wide range of participants and interested parties in both the technical advisory committee and the public listening sessions from OCVPs. All six in-person listening sessions were held in OCVPs.

Board staff brought resources, benefits, and outreach efforts to OCVPs throughout the state.

- The committee acknowledged the financial impact of regulatory or policy requirements on overburdened communities and sought solutions that would provide flexibility to address environmental health and safety issues while maintaining minimum standards that would be applied equitably throughout the state.
- The Board could use the following to track the equitable distribution of environmental health and safety by implementation of this rule:
    - Local health jurisdictions voluntarily providing school inspections data
    - Schools voluntarily recording the air quality in schools using carbon dioxide monitors
    - Using voluntary surveys with Department or Office of Superintendent of Public Instruction (OSPI) partnerships, identifying the number of schools or districts with extreme temperature readiness plans, indoor air quality plans, and integrated pest management.

Summary

The School Rules Review Project has developed a new rule that incorporates the best practices of the current (50-year-old) rule and adds updated scientific research and best practices. The technical advisory committee included advisors from the OSPI, large and small school districts, associations for school directors, maintenance, and operations administrators, school business officials, the parent teacher association, the Department, local health jurisdictions, rural schools, private schools, and a variety of school-related organizations. Throughout the rule-making process, the Board focused on listening to underserved communities, invited all schools to public meetings held in their area, invited community-based organizations serving overburdened or vulnerable communities to participate, and considered their comments in the development of the rule.

In developing the rule proposal, Board staff balanced the need for updated, minimum health and safety standards, the fiscal challenges for all schools, and ideal best practices. The committee and Board recommended a phased implementation that prioritizes health and safety for Washington schoolchildren. This allows for equitable and sustained implementation across the state. If accepted by the Legislature, the phased implementation will prioritize critical safety concerns that have the highest impact, such as chemical storage and indoor air quality. The phased implementation also mitigates fiscal concerns. It allows statewide implementation of the rule over time, with flexibility for districts and local health jurisdictions to prepare and develop resources. The phased implementation encourages building partnerships between schools and local health jurisdictions for the successful implementation of the full rule.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

WAC 246-370-001 Purpose

The purpose of this chapter is to set minimum environmental health and safety standards for school facilities operated for the primary purpose of providing education. 1

WAC 246-370-005 Definitions

1

(1) "Air contaminant" means pollutants in the air that could, depending on dose and circumstances, cause adverse health impacts.
(2) "Decibel (dB)" means a standard unit of measurement of sound pressure.
(3) "Decibel, A-weighted (dBA)" means a decibel measure that has been weighted in accordance with the A-weighting scale. The A-weighting adjusts sound level as a function of frequency to correspond approximately to the sensitivity of human hearing.
(4) "Department" refers to the Washington State Department of Health.
(5) "Emergency washing facilities" means equipment such as emergency showers, eyewashes, eye/face washes, hand-held drench hoses, or other similar units.
(6) "Emissions" mean substances released into the air, including gases and particles, from various sources.
(7) "Equivalent Continuous Sound Level" or "Leq" means the sound pressure level of a noise fluctuating over a period of time, expressed as the amount of average energy.
(8) "Foot candle" means a unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot.
(9) "Imminent health hazard" means a significant threat or significant danger to health or safety that requires immediate action to prevent serious illness, injury, or death.
(10) "Integrated pest management" means a program that reduces sources of food, water, and shelter for pests by using the least toxic pest controls when necessary.
(11) "Local board of health" means the county or district board of health as defined in RCW 70.05.010(3).
(12) "Local health officer" means a legally qualified physician who has been appointed as the health officer for the county or district public health department as defined in RCW 70.05.010(2) or their authorized representative.

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(13) "New construction" means new buildings or structures, including construction of additions to existing school facilities and reconstruction or retrofitting of an existing building not originally intended for use as a school facility. New construction does not include reconstruction of an existing school facility.
(14) "Noise abatement" means measures taken to reduce unacceptable sounds or vibrations.
(15) "Noise criterion" means a single number for rating the sound quality of a room by comparing actual or calculated sound level spectra with a series of established octave band spectra.
(16) "Noise criterion 35 (NC35)" means the curve for specifying the maximum permissible sound pressure level for each frequency band.
(17) "OSPI" refers to the Washington Office of Superintendent of Public Instruction.
(18) "Portable" means any school building with a prefabricated structure that can be transported and installed on-site to provide additional educational space.
(19) "Preschool" means an educational establishment or learning space offering early childhood education to children not old enough to attend kindergarten.
(20) "Readiness Plan" means a written guide to ensure the health and safety of the occupants of a school facility in the event of a particular hazard, such as extreme heat or wildfire smoke.
(21) "School" means any public institution of learning where the primary purpose is educational instruction for children in any grade from kindergarten through grade twelve, including transition programs, programs where students will advance to grade one the following year, and related activities by the public school as defined in RCW 28A.150.010 and any private school or private institution regulated by chapter 28A.195 RCW.
(22) "School facility" means all buildings and land intended primarily for student use including, but not limited to portables, sports fields, playgrounds, classrooms, and common areas.
(23) "School official" means a member of the school district or school staff who has the authority to make decisions on behalf of the district or school to maintain and improve environmental health and safety within the limitations of this rule.
(24) "Site assessment" means an evaluation of any historical or other readily available information on site conditions and surroundings to evaluate whether the site poses a potential hazard to human health and determine if further investigation is needed.
(25) "Source capture system" means a mechanical exhaust system designed and constructed to capture air contaminants at their source and release air contaminants to the outdoor atmosphere.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(26) "Specialized room" means a space or room that has a specific function that uses equipment, furniture, or supplies not found in a standard room that are a potential health and safety risk. This may include but is not limited to a career and technical education room, laboratory, art room, or health room.
(27) "Stationary machinery" means equipment that is designed to be installed in a fixed location and does not require intermittent movement to service different needs.
(28) "Transition services" means a coordinated set of activities as defined in WAC 392-172A-01190.

WAC 246-370-010 Applicability

1

(1) This chapter applies to all school facilities operated for the primary purpose of providing education, including those primary and secondary school facilities that offer preschool education or transition services. This chapter does not apply to:
  (a) Any facility or part of a facility that is licensed by the department of children, youth, and families under Title 110 WAC;
  (b) Private residences used for home-based instruction as defined by RCW 28A.225.010(4);
  (c) Facilities hosting educational programs where educational instruction is not a primary purpose, including, but not limited to, detention centers, jails, hospitals, mental health units, or long-term care facilities;
  (d) Private facilities where tutoring is the primary purpose;
  (e) Public or private postsecondary education facilities providing instruction to students enrolled in secondary school; and
  (f) State-tribal education compact schools established under chapter 28A.715 RCW.
(2) Additional environmental health and safety rules that apply to school facilities include, but are not limited to:
  (a) Chapter 246-215 WAC regarding facility and equipment sanitation, food preparation, food storage, and food temperature control;
  (b) Chapter 246-217 WAC regarding food service workers, including contracted staff and volunteers, who must maintain a current food worker card as set forth in chapter 246-217 WAC;

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(c) Chapters 246-260 and 246-262, as applicable, regarding water Recreation Facilities or aquatic venues;
(d) WAC 51-54A-0915 regarding the installation and maintenance of carbon monoxide detection and alarms in mechanical rooms and occupied zones; and
(e) RCW 43.70.830 through 43.70.845 regarding lead in drinking water if the facility was built or all plumbing was replaced before 2016.

(3) Schools must use sewer and liquid waste disposal that is connected to a municipal sewage disposal system or an on-site sewage disposal system designed, constructed and maintained under chapter 246-272A or 246-272B.

(4) Schools must provide drinking water from public water supplies regulated under WAC 246-290 or 246-291.

(5) These rules are not intended to replace or supersede the department of labor and industries' authority and jurisdiction under Title 296 WAC over employee safety and health.

(6) These rules are not intended to replace building code council requirements under Title 51 WAC. In the event this chapter is more stringent to protect health and safety it may supersede Title 51 WAC.

(7) If the local permitting jurisdiction received a complete building permit application for school construction before the effective date of this chapter, the construction-related requirements of chapter 246-366 WAC apply.

WAC 246-370-015 Good Safety Practice and Guidance

1

(1) Except where more specific requirements apply, school facilities must apply good safety practices to conditions which present a potential hazard to occupants of the school.

(2) The department in cooperation with OSPI shall review potentially hazardous conditions in schools which are not aligned with good safety practice, especially in specialized rooms.

(3) The department and OSPI shall jointly prepare a guide for use during routine school inspections to identify issues relating to good safety practices. The guide should include recommendations for safe facilities and safety practices.

(4) The guide shall be reviewed and updated at least every five years.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

WAC 246-370-020 Site Assessment

2

(1) A local health officer shall conduct or require that a site assessment be conducted when a school district is planning:
  (a) To construct a new school facility on a site that was previously undeveloped or developed for other purposes; or
  (b) To convert an existing structure for primary use as a school facility.
(2) A local health officer may conduct or require that a site assessment be conducted when a school district is planning to construct:
  (a) A new school facility on an existing school site; or
  (b) An addition to an existing school facility.
(3) A site assessment must include:
  (a) A Phase 1 Environmental Site Assessment (ESA) that meets the requirements of the American Society for Testing and Materials (ASTM) Standard #1527-21 (published December 2021);
  (b) Sampling and analysis of potential contaminants if the Phase 1 ESA indicates that hazardous materials may be present. Sampling and analysis must comply with the applicable rules of the department of ecology, WAC 173-303-110 ; and
  (c) A noise assessment that measures noise from all sources during the hours that school is normally in session.
    (i) The noise must not exceed:
      (A) An hourly average of 55 dBA or the mean sound energy level for a specified time in Leq 60 minutes; and
      (B) A maximum sound level, recorded during a specified time, measured as Lmax, of 75 dBA during the time of day the school is in session.
(4) A school official shall ensure:
  (a) The local health officer receives notification within 90 days of starting:
    (i) The preliminary planning for school construction that requires a review and approval of a site assessment by a local health officer under subsection (1) of this section; or
    (ii) The preliminary planning for school construction under subsection (2) of this section to determine if a site assessment is required;
  (b) Consultation with the local health officer throughout the plan development phase regarding the scope of the site assessment when one is required and the timeline for completion of the site assessment;

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(c) The submission of a written report to the local health officer for a required site assessment that assesses the potential impact on health and safety presented by the proposed site and includes, but is not limited to, the following:
(i) The findings and results obtained under subsection (3) of this section;
(ii) An analysis of the findings;
(iii) If a site exceeds sound levels under subsection (3)(c)(i), the school official must include a plan for noise reduction in the new construction proposal under WAC 246-370-030;
(iv) Identified health and safety risks present at the site;
(v) A description of any mitigation proposed to address identified health and safety risks present at the site;
(vi) Any site assessment-related information requested by the local health officer to complete the site assessment review and approval process; and
(d) The acquisition of a site review and written site approval from the local health officer when required under subsection (1) or (2) of this section.

(5) When notified by a school official of preliminary planning for school construction, the local health officer shall:
(a) Conduct an inspection of the proposed site;
(b) Determine whether a site assessment is required when notice is provided under subsection (4)(a)(ii) of this section and notify the school official of the determination;
(c) Review the inspection findings, written report provided under subsection (4)(c), and any other site assessment-related information for environmental health and safety risk;
(d) For site assessments conducted under subsection (1) of this section, provide written approval or describe site deficiencies needing mitigation to obtain approval or deny use of the proposed school facility site if mitigation is not possible within 60 days of receiving a complete request unless a school official and the local health officer agree to a different timeline; and
(e) For site assessments conducted under subsection (2) of this section, provide written approval or describe site deficiencies needing mitigation to obtain approval of the proposed school facility site within 60 days of receiving a complete request unless the school officials and the local health officer agree to a different timeline.

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(6) If a written site assessment request from a school official is received by the local health officer before the effective date of this section, the site assessment requirements of chapter 246-366 WAC apply unless otherwise specified in this chapter.

WAC 246-370-030 Construction Plan Review New, Alterations, and Portables

2

(1) The following school construction projects must be reviewed and approved by the local health officer:
- (a) Construction of a new school facility, playground, bathroom, shower, or specialized room;
- (b) Establishment of a school in all or part of any existing structure previously used for another purpose;
- (c) Additions or alterations consisting of more than 5,000 square feet of floor area or more than 20 percent of the total square feet of an existing school facility, whichever is less;
- (d) Alteration of a playground, bathroom, shower, or specialized room; and
- (e) Installation or construction of a portable classroom.

(2) A school official shall ensure:
- (a) Consultation with the local health officer takes place at the 50 percent design development stage of school construction project plans to determine if the project requires construction review;
- (b) The provision of additional documents, beyond the construction project plans, if requested by the local health officer, which may include, but are not limited to, written statements signed by the project's professional engineer or licensed architect verifying that design elements comply with requirements specified by this chapter;
- (c) Consultation with the local health officer to determine whether additional construction project review is required to ensure that the project meets the requirements of this chapter;
- (d) The submission of the design at the 100 percent development stage for the construction design plans.

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(e) The acquisition of a written approval from the local health officer for the construction project before starting construction;
  (i) If the school official meets the requirements of subsection (2)(a) but the local health officer does not meet the requirements of subsection (3), the school official may proceed with their scheduled construction timeline;
(f) The submission of a request for a preoccupancy inspection to the local health officer to correct any imminent health hazards before allowing occupancy at the school facilities; and
(g) The local health officer receives notification at least five business days before a desired preoccupancy inspection.

(3) The local health officer shall:
(a) Respond to a request to consult with a school official within 15 business days of receipt;
(b) Consult with a school official to determine the necessary documentation for plan review and approval of the particular project;
(c) Review construction project plans at the 50 percent design development stage to confirm the need for a construction review and approval to meet the health and safety requirements of this chapter;
(d) Consult with a school official when requiring additional construction plan reviews between the 50 and 100 percent construction plan design development stages;
(e) Identify and request any additional documents needed to determine compliance with the requirements outlined in this chapter;
(f) Provide written approval within 60 days of receiving the 100 percent design development for the construction design plans or provide a written statement describing construction project plan deficiencies that need to change to obtain approval. The school official and the local health officer may alter this timeline if mutually agreed upon;
(g) Conduct an inspection:
  (i) Before occupancy of a completed construction project and within five business days after receiving a request from a school official;
  (ii) At any point during the construction period to verify compliance with the requirements of this chapter;
  (iii) In a coordinated effort with the on-site project manager or other appropriate person identified by a school official; or

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(iv) To confirm satisfactory correction of the items identified under (h) or (i) of this subsection;

(h) If an imminent health hazard is identified during an inspection, work with the school official and local building official to identify and agree upon a solution that the school officials will implement before occupation of the affected portion; and

(i) If other conditions of noncompliance with this chapter are identified during an inspection, provide the school official with a written list of items and consultation in developing a correction schedule based on the level of risk to health and safety.

WAC 246-370-040 Routine Inspection

2

(1) The local health officer shall:

(a) Conduct an environmental health and safety inspection of each school facility within their jurisdiction every three years, prioritizing areas for emphasis based on risk;

(b) Notify school officials at the time of discovery, or immediately following the inspection, if conditions that pose an imminent health hazard are identified and follow the imminent health hazard requirements set forth in WAC 246-370-120;

(c) Consult with school officials upon completion of the inspection about findings and recommended follow-up actions and, if necessary, collaborate with school officials to develop a remediation schedule;

(d) Issue a final inspection report within 60 days following an inspection. The local health officer may establish an alternate timeline for issuing the final inspection report when agreed upon in consultation with school officials. The report must include inspection findings related to this chapter and any required remediation; and

(e) Confirm, as needed, that corrections are made.

(2) The local health officer may:

(a) Adjust the inspection interval of the schools within their jurisdiction by developing a written risk-based inspection schedule that is uniformly applied throughout the jurisdiction based on credible data or local risk factors. The time between routine inspections may not:

(i) Exceed five years; and

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(ii) Be more frequent than one year; or

(b) Allow a school official or qualified designee to conduct the required additional inspections under a program approved by the local health officer if the program includes provisions for:

(i) Assuring that the school official or designee conducting the inspection has attended training in the standards, techniques, and methods used to conduct an environmental health and safety inspection;

(ii) Completing a standardized checklist at each inspection; and

(iii) Providing a written report to the local health officer detailing the findings of the inspection, within 60 days of completing the inspection.

WAC 246-370-050 General Building Requirements

1

A school official shall ensure that school facilities:

(1) Are clean and in good repair;

(2) Do not attract, shelter, or promote the propagation of insects, rodents, bats, birds, or other pests of public health significance;

(3) Have floors that suit the intended use, allow easy cleaning, and dry easily to inhibit mold growth and mitigate fall risks;

(4) Have no projections from the finished ceiling that are less than seven clear vertical feet from the finished floor;

(5) Have vacuum breakers or backflow prevention devices installed on hose bibs, sinks, and supply nozzles where hoses or tubing can be connected;

(6) Provide proper storage for student jackets or backpacks, play equipment, and instructional equipment to mitigate trip, pest, or other public health hazards;

(7) Contain toilet and handwashing facilities that are accessible for use during school hours and scheduled events;

(8) Provide handwashing stations equipped with:

(a) Soap;

(b) Single-use towels, disposable towels, blower, or equivalent hand-drying device;

(c) Fixtures with water temperatures that do not exceed 120-degrees Fahrenheit; and

(d) Fixtures that deliver at least 10 seconds of running water if they are self-closing, metering faucets.

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(9) Provide toilet paper in restrooms;

(10) Provide handwashing sinks that are accessible where activities present a potential risk of microbiological or chemical contamination of the hands in any student spaces, which may include, but are not limited to: 3
- (1) Restrooms;
- (2) Specialized rooms; or
- (3) Health rooms; and

(11) Provide accessible drinking fountains that are constructed with a nozzle that directs an arc of water to flow away from the nozzle and is located above water-impervious flooring. The drinking fountains must be deactivated when attached to a handwashing sink in a specialized room or located in a restroom.

WAC 246-370-060 Showers and Restrooms

(1) For new construction or alterations of an existing shower facility for grades nine and above with classes in physical education or team sports, at least one shower must: 3
- (i) Meet the Federal Americans with Disabilities Act (ADA);
- (ii) Meet the requirements of the uniform plumbing code set forth in chapter 51-56 WAC;
- (iii) Be accessible to any student for use during school hours and scheduled events; and
- (iv) Contain floors that are slip resistant.

(2) For new construction or alterations of an existing shower facility for grades nine and above with classes in physical education or team sports, if a locker or dressing room is provided, it must have easy-to-clean walls and floor surfaces that are slip resistant.

(3) For new construction or alterations of an existing restroom facility, restrooms must:
- (a) Contain handwashing fixtures that do not have water temperatures that exceed 120 degrees Fahrenheit;
- (b) Meet the requirements of the uniform plumbing code set forth in chapter 51-56 WAC;
- (c) Contain floor surfaces impervious to water, slip-resistant, and sloped to floor drains;
- (d) Contain walls, floors, and ceilings that are easy to clean; and

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(e) Contain soap and single-use or disposable towels. Blower or equivalent hand-drying devices are prohibited.

WAC 246-370-070 Indoor Air Quality and Ventilation

A school official shall ensure:	
(1) The implementation of a written indoor air quality plan within five years of the effective date of this section that includes: (a) Identified areas of indoor air quality concerns and development of preventive measures to address the concerns; (b) A schedule to perform routine inspections of heating, ventilation, and cooling systems; (c) An integrated pest management plan; (d) A plan for monitoring and mitigating carbon dioxide levels if required by subsection (7)(b)(iii) of this section; and (e) A plan with identified actions for ensuring health and safety for periods of increased health risk or poor outdoor air quality;	1
(2) The control of air contaminant sources by: (a) Excluding sources of potential air contaminants from a school facility; or (b) Providing a space with appropriately used and maintained ventilation to minimize student exposure to potential air contaminants;	3
(3) The development and implementation of a plan to test for radon every five years in regularly occupied areas on or below ground level; (4) The prohibition of air fresheners, candles, or other products that contain fragrances; (5) The minimization of student exposure to construction activities that generate emissions by physically containing the activities or conducting activities when students are not present;	1
(6) The prompt control of identified moisture sources and remediation of mold using measures to minimize occupant exposure to mold and chemicals used during the remediation process;	3

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(7) Adequate ventilation by:
  (a) Ensuring direct mechanical exhaust for specialized rooms as set forth in WAC 246-370-140; and
  (b) Ensuring all student-occupied instruction and gathering spaces during hours of occupation provide outdoor air ventilation flow rates as set forth in chapter 51-52 WAC at the time the ventilation system was permitted;
    (i) If outdoor air ventilation flow rates were not established at the time of the original building construction, ventilation airflow rates must be operated to meet chapter 51-52 WAC or maximum outdoor air ventilation flow rates achievable within existing system capacity;
    (ii) Compliance is determined based on variables including but not limited to:
      (A) The type and area of the space;
      (B) The planned number of occupants;
      (C) The type of ventilation system; and
    (iii) If the school facility does not have a mechanical outdoor air ventilation system or the outdoor air flow rate cannot be determined, provide ongoing carbon dioxide concentration monitoring;

(8) Adequate filtration by:
  (a) Ensuring particulate matter filtration as set forth in chapter 51-52 WAC at the time the heating, ventilation, and air conditioning systems were permitted, including facilities that have small, ducted air handlers and ventilation systems;
    (i) If particulate matter filtration requirements were not established at the time of the original installation of the system, the system must meet chapter 51-52 WAC or the maximum particulate matter filtration achievable within existing system capacity;

(9) For schools with mechanical heating, ventilation, or cooling systems, the performance of routine maintenance that includes:
  (a) Testing and balancing for existing heating, ventilation, and air conditioning systems every fifteen years;
  (b) Performing routine inspections of existing heating, ventilation, and cooling systems to ensure systems are operating within intended parameters of this rule;
  (c) Replacing filters as needed to achieve required filtration and air flow rates; and
  (d) Maintaining records of these activities for review upon request by the local health officer.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

WAC 246-370-080 Temperature

(1) A school official shall ensure the development of an extreme temperature readiness plan and implement the plan when a school facility is occupied by students and either of the following conditions apply:	1
(a) Classroom temperatures are outside of the range of 65 degrees to 79 degrees Fahrenheit; or (b) Hallways, gymnasiums, and common area temperatures are outside of the range of 60 degrees to 79 degrees Fahrenheit.	3
(2) A school official may consult with a local health officer to develop an extreme temperature readiness plan.	1

WAC 246-370-090 Noise

A school official shall ensure: 1

(1) For new construction:
- (a) Ventilation equipment or other equipment that will contribute to mechanical noise sources in a classroom must include designs that ensure that the background sounds conform to a noise criterion curve or equivalent not to exceed NC-35. The school official shall certify that equipment and features are installed according to the approved plans;
- (b) The actual background noise at any student location within a newly constructed classroom must not exceed 45 dBA (Leqx) and 70 dB(Leqx) (unweighted scale) where x is thirty seconds or more. The health officer shall determine compliance with this section when the ventilation system and the ventilation system's noise generating components, such as the condenser, heat pump, and other similar components are in operation; and
- (c) The maximum ambient noise level in specialized rooms shall not exceed 65 dBA when all fume and dust exhaust systems are operating;

(2) Portable classrooms constructed before January 1, 1990, moved within the same school property or the same school district, are excluded from the requirements of this section if the portable classrooms:
- (a) Do not alter the noise abatement features;
- (b) Do not increase noise-generating features;
- (c) Were previously used for classroom instruction;

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(d) Do not change ownership; and

(e) Are located on a site that meets the noise assessment requirements set forth in WAC 246-370-020(3)(c);

(3) The maximum noise exposure for students in classrooms shall not exceed the levels specified in Table 1;

(4) Activities that expose students to sound levels equal to or greater than 115 dBA are prohibited; and

(5) Students are provided with and required to use personal protective equipment where noise levels exceed those specified in Table 1. Personal protective equipment must reduce student noise exposure to comply with the levels specified in Table 1.

Table 1 Maximum noise exposures permissible

Duration per day (hours)	Sound Level (dBA)
8	85
6	87
4	90
3	92
2	95
1-1/2	97
1	100
1/2	105
1/4	110

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

WAC 246-370-100 Lighting

A school official shall ensure that:

(1) Light intensities that meet or exceed those specified in Table 2 are provided. Natural lighting, energy-efficient lighting systems, lighting fixtures, or bulbs may be used to maintain the minimum lighting intensities; 1

Table 2 Lighting intensities measured 30 inches above the floor or on working or teaching surfaces. Some lighting fixtures may require a start-up period before reaching maximum light output.

Task	Min. Foot Candle Intensity
Specialized rooms where safety is of prime consideration or fine detail work is done, for example, family and consumer science laboratories, science laboratories (including chemical storage areas), shops, drafting rooms, and art and craft rooms.	50
Kitchen and food preparation areas.	50
General instructional areas, for example, study halls, lecture rooms, and libraries.	30
Gymnasiums: main and auxiliary spaces, shower rooms and locker rooms.	20
Non-instructional areas including auditoriums, lunchrooms, food storage rooms, assembly rooms, corridors, stairs, storerooms, and restrooms.	10

(2) Excessive brightness and glare in all instructional areas is controlled. Surface contrasts and direct or indirect glare must not cause excessive eye accommodation or eye strain problems;

(3) Sun control to exclude direct sunlight from window areas and skylights of instructional areas, assembly rooms, and meeting rooms during at least 80 percent of the normal school hours is provided. Sun control is not required for sun angles less than 42 degrees up from the horizontal. Sun control is not required if air conditioning is provided, or special glass is installed having a total solar energy transmission factor of less than 60 percent;

Proposed Rule

Phase Key

1	Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.
2	Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.
3	Full implementation of the rule, including new rule requirements such as specialized rooms.

(4) Lighting in a manner that minimizes shadows and other lighting deficiencies on work and teaching surfaces is provided; and
(5) Windows in sufficient number, size, and location to enable students to see outside at least 50 percent of the school day are provided. Windows are optional in specialized rooms.

WAC 246-370-110 Injury Prevention

A school official shall ensure:	1
(1) The mitigation of potential slip and fall hazards by, but not limited to: (a) Providing stairwells and ramps with handrails and stairs with surfaces that reduce the risk of injury; (b) Providing protection or barriers for areas that have fall risks such as balconies and orchestra pits; (c) Storing unsecured equipment in a manner that prevents unauthorized use or injury; (2) The storage of chemicals and cleaning supplies includes: (a) Manufacturer use instructions, warning labels, and safety data sheets for proper storage of the supplies; (b) Labels on supplies that are diluted from bulk chemical or cleaning agents with the accurate agent name and dilution rates; (c) The original bulk or concentrated containers of cleaning and disinfectant agents for reference to labels and instructions until diluted contents are exhausted; (d) Separation of incompatible substances; and (e) Access limited to authorized users;	3
(3) The use of fragrance-free and low-hazard cleaning and sanitation supplies when available or ensure cleaning at a time and manner that would limit exposure to students; and	1
(4) Documentation of a policy to mitigate injury and the spread of diseases if the school allows animals other than service animals in a school facility.	3

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Proposed Rule

Phase Key

1	Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.
2	Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.
3	Full implementation of the rule, including new rule requirements such as specialized rooms.

WAC 246-370-120 Imminent Health Hazard Procedure

(1) If a school official identifies a condition that could pose an imminent health hazard, a school official shall ensure: **2**
   (a) The immediate mitigation of hazards and prevention of exposure if an imminent health hazard is confirmed;
   (b) The immediate consultation with the local health officer to investigate the suspected hazard; and
   (c) Consultation with the local health officer in developing appropriate health and safety messages for school staff, students, and parents.

(2) If a local health officer identifies a condition that is an imminent health hazard at a school, the local health officer shall:
   (a) Immediately inform school officials of the imminent health hazard;
   (b) Consult with school officials to mitigate hazards and prevent exposure; and
   (c) If requested, assist school officials in developing health and safety messages for school staff, students, and parents.

WAC 246-370-130 Playgrounds

(1) A school official shall ensure: **2**
   (a) Consultation with the local health officer regarding playground review and approval requirements takes place prior to:
      (i) Installing new playground equipment or fall protection surfaces;
      (ii) Adding new playground features or equipment to an existing playground; or
      (iii) Modifying existing playground equipment, features, or fall protection surfaces;

   (b) The proper installation, maintenance, and operation of playground equipment, including used equipment, and fall protection surfaces: **3**
      (i) In a manner consistent with the ASTM F 1487-21: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use; and
      (ii) In a manner consistent with the manufacturer's instructions and *Consumer Product Safety Commission Handbook for Public Playground Safety*, 2010;

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(c) The local health officer receives requested information including playground plans, equipment specifications, and any additional information; and — 2

(d) Acquisition of a plan review and written approval from the local health officer before installing, adding, or modifying playground equipment or fall protection surfaces.

(2) The local health officer shall:

(a) Consult with a school official to determine necessary documentation for playground plan review and approval consistent with the scope of the particular project;

(b) Review playground plans and equipment specifications to confirm that the requirements of these rules are addressed;

(c) Identify and request any additional documents required to complete the review;

(d) Provide written approval or denial of the playground plans and equipment specifications within 60 days of receiving all documents needed to complete the review unless the school officials and the local health officer agree to a different timeline;

(e) Verify that playground installation complies with the requirements of this section; and

(f) Coordinate all playground-related inspections with the school official.

(3) The use of chromated copper arsenate or creosote-treated wood to construct or install playground equipment, landscape structures, or other structures on which students may play is prohibited. — 3

WAC 246-370-140 Specialized Rooms

(1) A school official shall ensure specialized rooms that are part of a school facility include, if applicable: — 3

(a) Single-use soap and single-use towels at handwashing sinks;

(b) Emergency washing facilities that contain an emergency shower or emergency eyewash fountain or both:

(i) An emergency shower must:

(A) Be provided when there is potential for major portions of a person's body to contact corrosives, strong irritants, or toxic chemicals; and

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(B) Deliver water that cascades over the user's entire body at a minimum rate of 20 gallons (75 liters) per minute for fifteen minutes or more;

(ii) An emergency eyewash fountain must:

(A) Be provided when there is potential for a person's eyes to be exposed to corrosives, strong irritants, or toxic chemicals;

(B) Irrigate and flush both eyes simultaneously while the user holds their eyes open;

(C) Contain an on-off valve that activates in one second or less and remains on without user assistance until intentionally turned off; and

(D) Deliver at least 0.4 gallons (1.5 liters) of water per minute for fifteen minutes or more;

(iii) Emergency washing facilities must:

(A) Be located so that it takes no more than 10 seconds to reach and the travel distance should be no more than 50 feet;

(B) Be kept free of obstacles blocking their use;

(C) Function correctly;

(D) Provide the quality and quantity of water that is satisfactory for emergency washing purposes; and

(E) Be designed, installed, and maintained in accordance with the American National Standards Institute (ANSI) publication Z358.1 - 2014, American National Standard for *Emergency Eyewash and Shower Equipment;*

(c) A prohibition of use and storage of compounds that are:

(i) Considered shock-sensitive explosives, for example, picric acid, dinitro-organics, isopropyl ether, ethyl ether, tetrahydrofuran, dioxane; or

(ii) Lethal at low concentrations when inhaled or in contact with skin, for example, pure cyanides, hydrofluoric acid, toxic compressed gases, mercury liquid and mercury compounds, and chemicals identified as the P-list under WAC 173-303-9903. This excludes prescribed medications such as epinephrine pens;

(d) Safety procedures and processes for instructing students regarding the proper use of hazardous materials or equipment;

(e) Appropriate personal protective equipment when exposure to potential hazards might occur;

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(f) Appropriate situation-specific emergency equipment is available when exposure to potential hazards might occur;
(g) Appropriate ventilation, source capture system, or other equipment approved by the local health officer to prevent the recirculation of air into the room or transfer of airflow into other parts of the school facility and to prevent contaminants from entering the students breathing zone; and
(h) Emergency shut-off valves or switches for gas and electricity connected to stationary machinery are installed during new construction. Valves or switches must:
(i) Be located close to the exit door;
(ii) Have unobstructed access; and
(iii) Have signage posted adjacent to the valve that room occupants can easily read and understand from the opposite side of the room during an emergency.

(2) If a school facility has a designated health room, a school official shall ensure that it includes:
(a) The means to visually supervise and provide privacy for room occupants;
(b) Surfaces that staff can easily clean and sanitize;
(c) A handwashing sink in the room;
(d) An adjoining restroom; and
(e) Mechanical exhaust ventilation that prevents air from flowing from the health room to other parts of the school facility.

WAC 246-370-150 Variances and Emergency Waivers

(1) A school official may: 2
(a) Submit a written variance request to the local health officer if there is an alternative that meets the intent of this chapter. The variance request must include:
(i) The specific rule section or sections that the variance would replace;
(ii) The alternative proposed to replace the rule section or sections;
(iii) A description of how the variance will provide a comparable level of protection as the rule section or sections that it will replace; and
(iv) Any clarifying documentation needed to support the request, including but not limited to, engineering reports, scientific data, or photos; and

Proposed Rule

Phase Key

1 Sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), or required the development of plans, such as the extreme temperature readiness plan.

2 Activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments.

3 Full implementation of the rule, including new rule requirements such as specialized rooms.

(b) Implement a variance only after obtaining approval from the local health officer.

(2) The local health officer shall provide written approval or denial of a request for a variance to the school applicant and the department within 60 days of receiving a complete written variance request, unless the school official and the local health officer agree to a different timeline.

(3) The local health officer may grant a school official an emergency waiver from some or all the requirements in this chapter for the use of a temporary facility, if the facility normally used by the school is not safe to be occupied.

WAC 246-370-160 Appeals

(1) A school official may appeal any environmental health and safety decisions or actions of the local health officer to the local board of health. 2

(2) The local board of health will conduct environmental health and safety appeals in a manner consistent with the written procedure within each office.

WAC 246-370-170 Severability

If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected. 1

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Fiscal Analysis

Contents

Cost Assumptions

General: All cost assumptions represent both the school and local health jurisdiction costs to comply with the proposed requirements in chapter 246-370 WAC beyond those currently incurred by 246-366 WAC.

For example, subsections 246-366-040 (current regulation) and 246-370-030 (proposed regulation) WAC both address construction plan reviews. This fiscal analysis will address any new costs or savings that will occur based on the change in requirements from the existing rule to the proposed rule.

Labor: Calculated labor costs assume that the new or additional requirements in chapter 246-370 WAC may require additional labor hours than currently required under chapter 246-366. To calculate the additional labor costs needed to comply with the rule, the Board staff surveyed local health officials (LHOs) and the Department of Health (department) staff. The survey gathered the estimated number of additional labor hours needed and identified the staff role that would be most likely to perform those additional labor hours.

Labor cost categories:

- **School Official Hours**: The school officials provided a range of hours for each task. The Board staff provided a minimum, maximum, and average of these results.
    - To help reduce labor hour costs to the schools, the Department is creating templates to guide schools when they develop the following plans required by the proposed rule (Please see **Appendix A: Readiness Plans** for the proposed guideline requirements):
        1. Indoor Air quality Plan
        2. Radon Plan
        3. Carbon Dioxide Monitoring Plan
        4. Integrated Pest Management Plan
        5. Extreme Temperature Readiness Plan

Some, but not all, local boards of health require cost recovery. Boards that require cost recovery may assess additional fees to schools in their jurisdiction.

- **LHO Hours**: LHOs that don't require fees for cost recovery will incur a cost for hourly services.
- **Hourly LHO Fees**: Schools will incur a cost when their LHOs require fees for cost recovery.

Labor hour wage calculation:

- **School Wage Calculation:** The school officials provided a range of "Duty" classifications that would perform the additional hours for each task. Each task has unique Duty classifications specific to that task. There will be slight variations in minimum and maximum labor wage calculations throughout this document. The Board staff used the Duty classifications that the school officials provided to calculate hourly wages based off Office of

Superintendent of Public Instruction's (OSPI) *Final School District Personnel Summary Reports 2023-24 School Year*[1].A list of all the Duty codes starts on page 23 that OSPI tracks from year to year. The total wage considers salary, benefits, and total days in 1.0 FTE. The data provided by the schools included a range of job duties that may perform the task in question, so Board staff provided a minimum, maximum, and average of these results.

- **LHO Wage Calculation:** Surveyed data from LHOs concluded that an Environmental Health Program Specialist would most likely perform the duties required in the proposed rule. LHOs also shared Washington State Local Health District wage information collected in 2024 by Washington State Association of Local Public Health Officials (WSALPHO) (See **Appendix B: Environmental Health Specialist Salaries** for salary ranges by jurisdiction size). WSALPHO's data provided a range of annual salaries based on service population size. The Board staff also estimated benefits and indirect costs based on email polls and phone conversations. Benefits and indirect costs can vary year by year, so we provide only an approximate percentage of the hourly wage. The annual wages, benefits and indirect costs were used to provide a minimum, maximum, and average hourly wage for all LHO labor calculations.

- **Department and OSPI Wage Calculations:** The Department and OSPI provided Job Class Titles and hourly estimates for the positions that would likely perform the duties required in the proposed rule. To calculate total labor costs the Board staff used data from the Office of Financial Management[2] for hourly wage and the Department's benefit and indirect costs rate.

  - **Construction Costs:** Professional engineers that specialize in school construction supported construction cost calculations. (See **Appendix C: Construction Cost Estimates**)
  - **Trade Service Costs:** Board staff conducted phone surveys of industry professionals that perform the work in Washington state, searched the internet, and consulted with professional engineers that specialize in school construction to calculate trade service costs.
  - **Consumable Goods:** Board staff priced goods through online retail searches, phone surveys, consulted with professional engineers, and consultation with department staff to calculate consumable goods.
  - **Costs Per Square Foot:** OSPI has an Information and Condition of Schools (ICOS) database, which serves as a web-based inventory tracking system for sites and facilities, where they store information and conditions of buildings for each school district.[3] Schools can enter data that pertains to their school in ICOS. Since we calculate some costs as costs per square foot, we used self-reported data for approximately 2,235 public schools.

[1] https://ospi.k12.wa.us/sites/default/files/2024-02/allpersonnelsummaryreport2023-24.pdf (accessed 4/21/25)
[2] https://ofm.wa.gov/state-human-resources/compensation-job-classes/job-classes-and-salaries
[3] https://ospi.k12.wa.us/policy-funding/school-buildings-facilities/information-and-condition-schools-icos

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Table 1: School Statistics

School Type	Total Square Feet
Smallest	929
Average	77,391
Largest	367,301

- **Cost Definitions**
  - **Initial Cost:** Some routine tasks cost more to set up initially but cost less with future repetition. For instance, the time it takes to do an initial walk through of an older, established large school and identify any safety deficiencies would take longer than the follow up routine walk through after repairing the deficiencies.
  - **One time Cost:** The cost to perform the task once (assuming a cost difference from the initial costs).
  - **Annual Cost:** The cost to perform the task once a year.
  - **Interval Cost:** The cost to perform a task at a required interval of time like once every 5 years.
- **All costs above $1.00 rounded up to whole numbers.**

Table 2: Number of Types of School

School Type	Number of Students	Number of Schools
Public[4]	1,104,247	2,235
Private[5]	88,998	531
Charter[6]	5,000	17

Table 3: Sections Not Analyzed

WAC Section and Title	Section Purpose	Exemption Reason
WAC 246-370-001 Purpose Formerly 246-366-005[7]	Introduces the topic of the rule and why adopted	Clarifies who the rule intends to govern
WAC 246-370-005 Definitions Formerly 246-366-010[8]	Add clarity to rule language and do not impose requirements for schools to conform to	Brings clarity to rule language only
WAC 246-370-010 Applicability Formerly 246-366-060[9], -070[10], and -130[11]	Outlines what type of school this WAC applies to and refers to other regulations that schools must conform to	Clarifies the entities this rule governs and other environmental health and safety regulations that govern those entities

4 https://ospi.k12.wa.us/policy-funding/school-buildings-facilities/information-and-condition-schools-icos 2024-2025 enrollment (Accessed 3/18/25)
5 https://projects.propublica.org/private-school-demographics/states/wa 2021-2022 Data (Accessed 4/7/25)
6 https://wacharters.org/charter-public-schools-faq/ (accessed 4/7/25)
7 https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-005&pdf=true
8 https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-010&pdf=true
9 https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-060&pdf=true
10 https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-070&pdf=true
11 https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-130&pdf=true

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

WAC Section and Title	Section Purpose	Exemption Reason
WAC 246-370-060 Showers and Restrooms Formerly WAC 246-366-090[12] and 100[13]	Stipulates shower and restroom requirements for new construction and alteration projects	No changes from WAC 246-366 other than clarifying language and removal of duplicative building code requirements
WAC 246-370-090 Noise Formerly WAC 246-366-110[14]	Stipulates permissible levels of noise within a school facility	No changes from WAC 246-366 other than non-substantive changes clarifying language
WAC 246-370-100 Lighting Formerly WAC 246-366-120[15]	Stipulates required lighting levels based on tasks performed within a school facility	No changes from WAC 246-366 other than non-substantive changes clarifying language
WAC 246-370-160 Severability Formerly WAC 246-366-160[16]	Establishes the independence of individual provisions of the rule and how they remain valid if deeming one provision invalid	Non-substantive changes, clarifying language
WAC 246-370-170 Appeals New WAC Topic	Explains how an entity can appeal a decision made by the local health officer	Explains a process for appeals

[12] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-090&pdf=true
[13] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-100&pdf=true
[14] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-110&pdf=true
[15] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-120&pdf=true
[16] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-160&pdf=true

Fiscal Analysis by Section

WAC 246-370-015 Guidance

Formerly 246-366-140[17]

WAC 246-366-140 requires the department and OSPI to jointly prepare a guide used by staff during routine inspections. WAC 246-366-140 requires the creation of the guide but does not require updates to the guide at any frequency. The department published the first *Health and Safety Guide for K-12 Schools in Washington State* (K-12 Guide) in June 2000. The department and OSPI published two subsequent updates of the guide. Once in January 2003 and a second in September 2024.

New Requirements of WAC 246-370-015:

- The department must review and update the guide at least every five years.

Costs

Table 4: Labor: One Time Costs

Agency	Position	Hourly Total Compensation	Total Hours	Position Total
OSPI	Administrative Program Specialist 2	$69	120	$8,222
Department	Environmental Planner 4	$72	350	$25,373
Department	Environmental Planner 3	$67	200	$13,349
Department	Environmental Planner 3	$67	200	$13,349
LHO	Environmental Health Specialist 3	$106	75	$7,950
			Total	**$68,243**

[17] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-140&pdf=true (Accessed 4/2025)

Table 5: Labor: Once Every Five Years Costs

Agency	Position	Hourly Total Compensation	Total Hours	Position Total
OSPI	Administrative Program Specialist 2	$69	40	$2,741
Department	Environmental Planner 4	$72	300	$21,749
Department	Environmental Planner 3	$67	100	$6,674
Department	Environmental Planner 3	$67	100	$6,674
LHO	Environmental Health Specialist 3	$106	50	$5,300
			Total	**$43,138**

WAC 246-370-020 Site Assessment

Formerly 246-366-030[18]

A site assessment provides a historical review of properties and considers commonly known and reasonably ascertainable information to identify recognized environmental conditions in connection with the subject property and the surrounding area.[19]

WAC 246-366-030 currently requires "the board of education to obtain written approval from the health officer that the proposed development site presents no health problems." WAC 246-366-030 also requires the completion of a noise assessment at the site before beginning construction.

New requirements of WAC 246-370-020

WAC 246-366-030 currently requires "the board of education to obtain written approval from the health officer that the proposed development site presents no health problems." WAC 246-366-030 also requires the completion of a noise assessment at the site before beginning construction.

New requirements of WAC 246-370-020

- Adds an American Society for Testing and Materials (ASTM) Phase 1 Environmental Site Assessment
- Requires a school official to notify the LHO 90 days before construction planning and throughout the plan development stage of the construction project
- Requires a school official to submit a written report on the health and safety impacts of the construction project
- Adds a 60-day deadline for LHOs to approve or deny completed site assessments
- Gives LHOs flexibility to decide if a new school facility on an existing school site or if an addition to an existing school facility requires a site assessment

Costs

A basic ASTM Phase 1 Site Assessment researches and evaluates historical site conditions and the surrounding areas. This includes historical land use to identify known soil contamination issues or other environmental factors of interest. A site assessment for a renovation of an existing building will require additional research to assess the building use and potential building contamination. If an assessment raises concerns about contamination of a site, a Phase 2 Site Assessment might be required. During a Phase 2 site assessment, physical testing of the ground or building materials might be required to confirm contamination and make recommendations for remediation if needed.

Phase 1 and Phase 2 Site assessment costs were an estimate from phone surveys of companies that perform site assessments in Washington state.

[18] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-030&pdf=true (Accessed 12/2024)
[19] https://www.astm.org/e1527-21.html (Accessed 12/2024)

Table 6: Trade Service Cost: Cost per ASTM Site Assessment

Task	Min.	Max.
ASTM Phase 1 Site Assessment	$1,400	$5,000
ASTM Phase 2 Site Assessment	$10,000	$30,000

After a completed Phase 1 or Phase 2 site assessment, the LHO will need to review the results and approve the site for construction.

Table 7: Site Assessment: Additional LHO Labor

	Hourly Wage	Hours	Total Costs Per Site Assessment Review
Min.	$40	3	$120
Avg.	$71	7	$497
Max.	$105	12	$1,260

Table 8: Site Assessment: LHO Hourly Fee

	Hourly Fee	Hours	Total Costs Per Site Assessment Review
Min.	$100	3	$300
Avg.	$162	7	$1,134
Max.	$250	12	$3,000

Schools surveyed indicated that smaller schools without dedicated staff or larger schools would take longer to complete the site assessment than those schools that were smaller or had dedicated staff.

Table 9: Site Assessment: Additional School Official Labor

	Hourly Wage	Hours	Total Costs Per Site Assessment
Min.	$48	2	$96
Avg.	$107	61	$6,527
Max.	$133	200	$26,600

Table 10: Total Additional Labor Costs

Labor Description	Min.	Avg.	Max.
Total Costs to LHO without fee recovery	$120	$497	$1,260
Total Costs to LHO with fee recovery	$0	$0	$0
Total costs to schools if charged LHO Fee	$396	$7,661	$29,600
Total costs to schools if not charged LHO Fee	$96	$6,527	$26,600

WAC 246-370-030 Construction Plan Review New, Alterations, and Portables

Formerly 246-366-040(1)&(2)(a)[20]

Before the start of construction, a school official must submit construction plans for review and approval. The LHO must review the plans and discuss possible changes to construction based on current health and safety regulations. Upon completion, the LHO will inspect the newly constructed building to ensure no imminent health hazards exist and that the building complies with the current regulations.

New requirements of WAC 246-370-030

- Added additional parameters requiring a construction plan review:
  - New or altered playgrounds
  - New or altered specialized rooms
  - New or altered bathrooms or showers
  - Remodeling an existing building that was not used as a school facility
  - Altering more than 5,000 square feet or 20% of the total square feet of the school
  - Installation of a portable classroom
- Added a specific timeline for the construction plan review:
  - A school official will consult with LHO at 50% design development.
  - A school official will request a preoccupancy inspection at least five days in advance.
  - An LHO has 15 days from receipt of a request to consult with a school official.
  - An LHO provides construction review results within 60 days of receiving the completed 100% design development paperwork.
- Added flexibility for school officials and LHOs:
  - After the initial construction review at 50% design development, the LHO determines the need for additional review.
  - If at any time the LHO cannot meet the required timeline requirement of 246-370-030 WAC, the school official may choose to proceed with construction.

Costs

Findings from LHO surveys concluded that the local health staff already perform these tasks, and they require no additional labor hours (see Table 11). Most schools surveyed indicated that it would take up to four additional hours to complete the construction plan review, while two smaller schools without dedicated staff indicated that it would take 40 to 100 additional hours to complete the construction plan review process in the proposed rule.

[20] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-040&pdf=true (Accessed 12/2024)

Table 11: Construction Plan Review: Additional LHO Labor Hours

	Hourly Wage	Hours	Total Costs Per Plan Review
Min.	$0	0	$0
Avg.	$0	0	$0
Max.	$0	0	$0

Table 12: Construction Plan Review: Additional School Official Labor Hours

	Hourly Wage	Hours	Total Costs Per Plan Review
Min.	$46	0	$0
Avg.	$106	13	$1,378
Max.	$134	100	$13,400

WAC 246-370-040 Routine Inspection

Formerly WAC 246-366-040(2)(b)[21]

Routine inspections of school facilities by an LHO ensure that the environmental health and safety of the school complies with the regulations. WAC 246-360-040(2)(b) requires an LHOs to inspect school facilities on a routine basis.

New requirements of WAC 246-370-040

- LHOs must inspect school facilities once every three years.
- LHOs have the flexibility to increase the frequency of inspections up to once every year or decrease the frequency of inspections to once every five years based on local risk factors or credible data.
- An LHO may have a qualified designee complete additional inspections.
- LHOs have 60 days to issue a final report to school officials.

Cost

Since LHOs have flexibility based on the need to alter the routine inspection frequency of their district, a total cost per year cannot be determined, however we have calculated the total additional cost per inspection below.

Table 13: Routine Inspection: Additional LHO Hours

	Hourly Wage	Hours	Total Cost
Min.	$40	1	$40
Max.	$105	2	$210

Table 14: Routine Inspection: Additional School Official Hours

	Hourly Wage	Hours	Total Costs
Min.	$42	0	$0
Max.	$133	6	$798

Table 15: Routine Inspection: Combined Totals

	Total
Min.	**$40**
Max.	**$1,008**

Regardless of the routine inspection schedule mentioned above, the local health officers and qualified routine inspection designee or school official must attend annual inspection training.

[21] https://app.leg.wa.gov/wac/default.aspx?cite=246-366-040 (Accessed 12/2024)

Table 16: Routine Inspection: Required Annual LHO Annual Training

	Hourly Wage	Hours	Total Cost
Min.	$40	0	$0
Max.	$105	40	$4,200

Table 17: Routine Inspection: Required Annual School Official Training

	Hourly Wage	Hours	Total Cost
Min.	$42	4	$168
Max.	$133	6	$798

Table 18: Costs for Routine Inspection Per Year: Combined Training Totals

	Total
Min.	**$168**
Max.	**$4,998**

WAC 246-370-050 General Building Requirements

Formerly WAC 246-366-050[22]

This section of the rule describes the basic requirements that all school facilities should comply with such as:

- Clean and in good repair
- Free of pests
- Appropriate floors for intended use
- Adequate storage for loose items to prevent injuries
- Toilet and handwashing facilities available during school and school events
- Provide accessible drinking fountains

New requirements from WAC 246-370-050

- Add vacuum breakers or backflow devices on all faucets that can connect a hose or tube to the fixture and be used for activities like filling a mop bucket or diluting chemicals

Cost

Any sink that can connect a hose or tube to faucets requires a vacuum breaker or back-flow prevention device installed to prevent potential backflow of unsafe water into the potable water pipes of the school facility. These can be purchased at a local hardware store or purchased online and shipped directly to the school. The plumbing code requires backflow prevention devices. However, we can't determine how many schools currently have backflow devices or how many sinks can connect a hose or tube, therefore the total cost to schools is indeterminate.

Table 19: Labor Costs: One-Time Costs for Install

	Hourly Wage	Hours	Total Costs Per Install
Min.	$64	0.10	$6.40
Max.	$64	0.50	$32.00

[22] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-050&pdf=true (Accessed 12/2024)

Table 20: Consumable Goods: One Time Cost Per Device

Goods	Min.	Max.
Self-Draining Vacuum Breaker[23]	$9	$25
Faucet with inline Vacuum Breaker[24, 25]	$96	$130

[23] https://www.homedepot.com/pep/Arrowhead-Brass-Chrome-Fine-Thread-Self-Draining-Vacuum-Breaker-PK1390/202579291?clickid=yybU9B2fAxyKR-R0QhVQ3UGOUks1guWC0XEVUM0&irgwc=1&cm_mmc=afl-ir-2003851-1420157-EdgeBingFlow (Accessed 4/2025)

[24] https://www.amazon.com/American-Standard-8344212-0039999997-Service-Breaker/dp/B00CH4RW44/ref=asc_df_B00CH4RW44?tag=bingshoppinga-20&linkCode=df0&hvadid=79920803409762&hvnetw=o&hvqmt=e&hvbmt=be&hvdev=c&hvlocint=&hvlocphy=&hvtargid=pla-4583520382335840&psc=1 (Accessed 4/2025)

[25] https://www.amazon.com/Zurn-Z843M1-RC-Chrome-Plated-Breaker-Handles/dp/B001UOZVDQ/ref=asc_df_B001UOZVDQ?tag=bingshoppinga-20&linkCode=df0&hvadid=80058242473023&hvnetw=o&hvqmt=e&hvbmt=be&hvdev=c&hvlocint=&hvlocphy=&hvtargid=pla-4583657821965601&psc=1 (Accessed 4/2025)

WAC 246-370-070 Indoor Air Quality and Ventilation

Formerly WAC 246-366-080[26]

New WAC Chapter

This new chapter of WAC includes specific requirements to improve and maintain indoor air quality. Indoor air quality standards help to control airborne pollutants and introduce and distribute adequate outdoor airflow. This contributes to a favorable environment for students, better performance of teachers and staff, and a sense of comfort, health, and well-being. Comparative risk studies performed by the Environmental Protection Agency (EPA) and its Science Advisory Board (SAB) have consistently ranked indoor air pollution among the top five environmental risks to public health. Improper indoor air quality can increase health issues such as cough, eye irritation, headache, and asthma. Nearly one in 13 children of school-age have asthma, the leading cause of school absenteeism due to chronic illness. Substantial evidence shows that indoor environmental exposure to allergens, such as dust mites, pests, and molds, can trigger asthma symptoms. These allergens commonly exist in schools.[27]

New requirements from WAC 246-370-070

- Develop an indoor air quality plan
- Remove and exclude potential sources of air contaminants
- Develop an integrated pest management plan
- Monitor carbon dioxide concentrations
- Test for radon
- Prohibit fragrances
- Contain emissions from construction
- Control mold growth and exposure
- Provide appropriate ventilation
- Provide appropriate air filtration
- Inspect and maintain ventilation systems
- Test and balance mechanical ventilation systems every 15 years

Costs: Indoor Air Quality

Labor Indoor Air Quality: One Time Cost

Some schools surveyed stated that they have already developed integrated pest management and radon testing plans. Developing these plans would not be a new cost for all schools, just those without plans.

[26] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-080&pdf=true (Accessed 4/2025)
[27] https://www.epa.gov/iaq-schools/reference-guide-indoor-air-quality-schools#IAQRG_Section1 (Accessed 11/2024)

Table 21: Indoor Air Quality: Develop Indoor Air Quality Plan

Labor	Hourly Wage	Hours	One-Time Cost
Min.	$43	8	$344
Max.	$134	10	$4,288

Table 22: Indoor Air Quality: Develop Integrated Pest Management Plan

Labor	Hourly Wage	Hours	One-Time Cost
Min.	$43	0	$0
Max.	$134	10	$1,340

Table 23: Indoor Air Quality: Develop Radon Plan

Labor	Hourly Wage	Hours	One-Time Cost
Min.	$43	0	$0
Max.	$134	10	$1,340

Table 24: Indoor Air Quality: One-time Cost Totals

	One-Time Cost Total
Min.	**$344**
Max.	**$6,968**

Labor Indoor Air Quality: Annual Cost

Some schools surveyed indicated that they already implement the requirements of the proposed indoor air quality section of this rule in their schools and therefore they would not incur any new costs. Only schools that have not implemented these requirements would incur costs. The total cost to all schools is indeterminate.

Table 25: Indoor Air Quality: Implement Indoor Air Quality Plan Annual Cost

	Hourly Wage	Hours	Total Annual Costs
Min.	$43	0	$0
Max.	$134	68	$9,112

Schools surveyed said that if they did not have dedicated staff members to implement a pest management plan or have never implemented a pest management plan, it would take an additional 200 to 600 hours annually to implement a pest management plan.

Table 26: Integrated Pest Management Plan Without Dedicated Staff Annual Costs

	Hourly Wage	Hours	Total
Min.	$43	200	$8,600
Avg.	$80	440	$35,200
Max.	$134	600	$68,400

Schools with dedicated staff or schools that already have a pest management plan said they would need the following additional hours to implement an integrated pest management plan.

Table 27: Integrated Pest Management Plan with Dedicated Staff Annual Costs

	Hourly Wage	Hours	Total
Min.	$43	5	$215
Avg.	$80	12	$960
Max.	$134	18	$2,052

Table 28: Indoor Air Quality: Annual Cost Totals

	Annual Cost Total
Min.*	**$515**
Max.**	**$77,512**

* Minimum total reflects a school that already has an integrated pest management plan developed and has dedicated staff to implement the plan.

** Maximum total reflects a school that will need to develop an indoor air quality plan and a pest management plan and that does not have dedicated staff to implement the pest management plan.

Consumable Costs: Radon Testing Every Five Years

The proposed rule requires radon testing once every five years. Schools test radon on all ground-floor or sub-ground classrooms in a school. Using data from ICOS, we can estimate the number of classrooms that would need to be tested, but we cannot determine the total. Data shows that schools range from one to seven floors and have anywhere from one to 120 classrooms. The data shows at least one school with a single floor and 87 classrooms, which would all need to be tested.

Table 29: Indoor Air Quality: Implement Radon Plan Every Five Years

	Hourly Wage	Hours	5 Year Cost
Min.	$43	1	$43
Max.	$134	50	$6,700

Table 30: Consumable Costs: Radon Testing Every Five Years

	Test Cost	Number of Tests	5 Year Cost
Min.[28]	$12	1	$12
Max.[29]	$16	87	$1,392

[28] https://www.homedepot.com/pep/PRO-LAB-Radon-Gas-Test-Kit-RA100/100141467?mtc=SEM-BF-CDP-BNG-D26P-026_005_PUMPS-NA-NA-NA-DSA-NA-NA-NA-NA-NBR-NA-NA-NEW-NA-N2025_LBT&cm_mmc=SEM-BF-CDP-BNG-D26P-026_005_PUMPS-NA-NA-NA-DSA-NA-NA-NA-NA-NBR-NA-NA-NEW-NA-N2025_LBT-21692166716-167614481895-1738649489211&gclid=ccedf711c6ad124e499990fdde1850a1&gclsrc=3p.ds&msclkid=ccedf711c6ad124e499990fdde1850a1 (Accessed 4/2025)

[29] https://www.bing.com/shop/productpage?q=radon+test+kits&filters=scenario%3a%2217%22+gType%3a%2212%22+gId%3a%22302571249599%22+gIdHash%3a%220%22+gGlobalOfferIds%3a%2230257124959 9%22+AucContextGuid%3a%220%22+GroupEntityId%3a%22302571249599%22+NonSponsoredOffer%3a%22True%22&productpage=true&FORM=SHPPDP&browse=true (Accessed 4/2025)

Costs: Ventilation

The ventilation and filtration subsections of WAC 246-370-070 allow schools the flexibility to maximize outdoor airflow rates and increase filtration where possible within the capabilities of the systems that already exist within the school facility. This means that schools will only incur costs based on where their current ventilation needs require them to make changes.

This report includes all potential costs for schools to conform with WAC 246-370-070(7)(b) of the proposed rule. Many of the total costs in this section will be determined by the size of the school. Since school sizes vary from school to school, some of the total costs to schools will be indeterminate. If we could not determine the total costs to a school, we used a cost per square foot or the total cost of one consumable good.

For ventilation specifically, schools will have three options to comply with the ventilation requirements in the proposed rule.

1. WAC 246-370-070(7)(b) "*Ensuring all student-occupied instruction and gathering spaces during hours of occupation provide outdoor air ventilation flow rates as set forth in chapter 51-52 WAC at the time the ventilation system was permitted.*"

   If a school's ventilation system complies with this subsection of the rule, the school does not need to take any further action and therefore will not incur a cost.

2. If the school cannot comply with WAC 246-370-070(7)(b), then WAC 246-370-070(7)(b)(i) states "*If outdoor air ventilation flow rates were not established at the time of the original building construction, ventilation airflow rates must be operated to meet chapter 51-52 WAC or maximum outdoor air ventilation flow rates achievable within existing system capacity.*"

   To conform with this subsection of the proposed rule, a school must hire a professional to test and balance (TAB) the ventilation system.

Table 31: Trade Services: One Time Cost

Task	Cost (per sq ft)	Small School	Average School	Large School
Test and Balance	0.81	929 sq ft	77,391 sq ft	367,301 sq ft
	Total	**$753**	**$62,687**	**$297,514**

3. If the school cannot comply with WAC 246-370-070(7)(b) or WAC 246-370-070(7)(b)(i), then the school must conform with WAC 246-370-070(7)(b)(iii), which states "*If the school facility does not have a mechanical outdoor air ventilation system or the outdoor air flow rate cannot be determined, provide ongoing carbon dioxide concentration monitoring.*"

   To conform with this subsection of the rule a school must develop a carbon dioxide monitoring plan and purchase a carbon dioxide sensor to monitor carbon dioxide in at least one room. The first year of implementation will take slightly more labor hours to set up the monitoring and tracking system plan.

Table 32: Consumable Goods Ventilation: One-time Cost Per Room

Goods	Min.	Max.
Portable carbon dioxide sensor	$170	$3,425
Fixed carbon dioxide sensor and installation	$2,000	$2,500

Table 33: Labor Ventilation: Develop Carbon Dioxide Monitoring Plan - One Time Cost

	Hourly Wage	Hours	One-Time Cost
Min.	$43	5	$215
Max.	$134	10	$1,340

Table 34: Labor Ventilation: Implementation of Carbon Dioxide Monitoring Plan – First Year Initial Cost

	Hourly Wage	Hours	One-Time Cost
Min.	$43	25	$1,075
Max.	$134	200	$26,800

Table 35: Labor Ventilation: Carbon Dioxide Monitoring Plan - Annual Cost

	Hourly Wage	Hours	Annual Cost
Min.	$43	20	$860
Max.	$134	175	$23,450

Costs: Filtration

This report includes all potential costs for schools to conform with WAC 246-370-070(8) of the proposed rule. The costs in this section will depend on the size of the school to determine the total cost to comply with the proposed rule. Since school sizes vary from school to school, the total costs for schools will be indeterminate. Since we cannot determine the total costs to a school, we used the cost per square foot to comply with this rule.

Consumable Goods Ventilation: Annual Cost

Schools will have two options to comply with the filtration requirements WAC 246-370-080(8) of the proposed rule.

1. WAC 246-370-070 (8)(a) "*Provide adequate filtration by ensuring particulate matter filtration as set forth in chapter 51-52 WAC at the time the heating, ventilation, and air conditioning systems were permitted, including in facilities that have small, ducted air handlers and ventilation systems.*"

   If a school's filtration system complies with this subsection of the rule, the school does not need to take any further action and therefore will not incur a cost.

2. If the school cannot comply with WAC 246-370-070(8)(a) then WAC 246-370-070(8)(a)(i) states "*If particulate matter filtration requirements were not established at the time of the original installation of the system, the system must meet chapter 51-52 WAC or the maximum particulate matter filtration achievable within existing system capacity.*"

   Currently, chapter 51-52 WAC requires the equivalent filtration rate of a MERV 13 filter. Schools typically do not install a filter lower than MERV 8. The estimates below cover the increased cost (per square foot) to replace a MERV 8 with a MERV 13 filter.

Table 36: Consumable Goods Ventilation: Annual Increase Filter Size from MERV 8 to MERV 13

	Cost (per sq ft)	Square Feet	Total
Min.	$0.07	929	$66
Max.	$0.10	367,301	$36,731

Table 37: Consumable Goods Ventilation: Annual Increased Utility Rates Depending on Fuel Source

	Cost (per sq ft)	Square Feet	Total
Min.	$0.01	929	$10
Max.	$0.02	367,301	$7,347

Trade Services: Once every 15 years

TAB involves testing and adjusting the air and water flow, pressure, temperature, and humidity of heating, ventilation, and air conditioning (HVAC) systems. Certified professionals typically test the system, which requires specialized equipment to measure and adjust the HVAC systems. The TAB process includes visual inspection, functional testing, measuring airflow rates, adjusting system components, and documenting the results.[30] The total cost to schools to perform a TAB will vary from school to school depending on school size and therefore is indeterminate.

Table 38: Trade Services: Once every 15 years

Task	Cost (per sq ft)	Small School	Avg. School	Large School
Test and Balance	0.81	929	77,391	367,301
	Total	**$753**	**$62,687**	**$297,514**

Labor: Routine Ventilation Inspections

The proposed rule requires regular filter replacement for mechanical ventilation systems; however, manufacture specifications require filter replacements to ensure that the mechanical ventilation system remains operable. Since this proposed rule does not add a new requirement, we did not include the cost for filter replacement in this fiscal report.

The rule does require “routine” ventilation inspections, which manufacturers usually only recommend but don’t require. Depending on the type of system, the school could complete this task several times a year. The total annual cost to schools is indeterminate, however the costs below cover one inspection per year.

[30] https://bluerithm.com/test-and-balance-tab-of-an-hvac-system-what-it-is-and-why-its-important/ (Accessed 2/2025)

Table 39: Labor Ventilation: Routine Ventilation Inspection

	Hourly Wage	Hours	Per Inspection Cost
Min.	$43	2	$86
Max.	$134	8	$1,072

WAC 246-370-080 Temperature

Formerly

This section of the rule stipulates the permissible indoor temperature range of school facilities. WAC 246-366-090 and WAC 246-370-090 require that classrooms maintain a minimum temperature of 65 degrees Fahrenheit and that gymnasiums and other “common” areas maintain a minimum temperature of 60 degrees Fahrenheit.

New requirements from WAC 246-370-080

- Sets a maximum indoor temperature of 79 degrees Fahrenheit for the school facility
- Requires school officials to develop an extreme temperature readiness plan

Costs

Each school facility will prepare a customized plan to implement when the facility or parts of the facility rise above the maximum or fall below the minimum temperature required in WAC 246-370-090 for extended periods of time. Since weather conditions vary geographically and from year to year, each school will customize their readiness plan for their unique circumstances, the total annual cost to implement the plan is indeterminate.

Table 40: Develop Extreme Temperature Readiness Plan

	Hourly Wage	Hours	One-Time Cost
Min.	$65	1	$65
Max.	$133	10	$1,330

WAC 246-370-110 Injury Prevention

Formerly WAC 246-366-050[31]

This section of the rule requires general overall facility injury prevention.

New requirements from WAC 246-370-110

- Provide fall protection for balconies and orchestra pits
- Store unsecured equipment when not in use
- Update chemical and cleaning supply storage
- Provide fragrance-free and low-hazard cleaning and sanitation supplies
- Develop an animal safety plan

Cost

Consumable Goods: One Time Cost

This section requires adequate fall guards when two adjacent occupied areas have a minimum height of 30 inches per chapter 1015.2 of the 2024 International Building Code.[32] Most schools already have the required protection in place. The size of an area that would require a fall guard varies from school to school, therefore the total cost to install fall guards is indeterminate.

Table 41: Consumable Goods: One Time Cost

Goods	Cost (per linear foot)
Fall protection guards	$350

Labor Chemical and Cleaning Supply Storage

Proper storage and use of cleaning and chemical supplies requires a school to do an initial walkthrough of the school and inventory the supplies. Some schools, especially small elementary schools, may already comply. Larger high schools with multiple specialized classrooms or older schools with large amounts of outdated or unlabeled supplies will take longer to inventory and properly store all supplies. Schools already in compliance will only have recurring annual maintenance costs.

[31] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-050&pdf=true (Accessed 4/2025)
[32] https://codes.iccsafe.org/content/IBC2021P1/chapter-10-means-of-egress#IBC2021P1_Ch10_Sec1015 (Accessed 2/2025)

Table 42: Labor Chemical and Cleaning Supply Storage: One Time

	Hourly Wage	Hours	One-Time Cost
Min.	$43	0	$0
Max.	$134	32	$4,288

Table 43: Labor Chemical and Cleaning Supply Storage: Annual Maintenance

	Hourly Wage	Hours	Annual Cost
Min.	$43	1	$43
Max.	$134	10	$1,340

Fragrance-Free and Low-Hazard Cleaning Supplies

Fragrance-free and low-hazard cleaning supplies compare in price to equivalent supplies with fragrances or those with a higher health hazard. Schools won't incur an additional cost to comply with this requirement of the proposed rule.

Labor Animal Safety Plan: One Time Cost

Not all schools allow animals on the premises and would not require an animal safety plan.

Table 44: Labor Animal Safety Plan: One Time Cost

	Hourly Wage	Hours	One Time Cost
Min.	$43	0	$0
Max.	$134	120	$16,080

WAC 246-370-120 Imminent Health Hazard Procedure

New WAC Chapter

This section of the rule requires that a school official take action when they identify an imminent health hazard in a school facility. An imminent health hazard could be a sewage leak, prolonged utility interruption, fires, floods, etc.

New requirements from WAC 246-370-120

- Identify and mitigate exposure to an imminent health hazard
- Collaborate between school officials and LHOs to investigate the potential hazard

Costs

School officials currently identify and mitigate potential health hazards in schools. There will be no additional costs to schools to conform to this requirement.

Labor Imminent Health Hazard Annual Cost

LHOs expect additional labor hours associated with this requirement when we require school officials to report potential health hazards to their local health department.

Table 45: Additional Labor: Imminent Health Hazard LHO Consulting

	Hourly Wage	Hours	Annual Cost
Min.	$40	1	$40
Max.	$105	100	$10,500

WAC 246-370-130 Playgrounds

New WAC Chapter

This section of the rule sets minimum installation and maintenance requirements for new and updated playgrounds.

New requirements from WAC 246-370-130

- School officials must submit plans and consult with their LHO before installing, updating, or modifying playground structures or fall protection surfaces.
- LHOs have 60 days to approve or deny the school official's plans for playground construction.
- School officials must maintain equipment consistent with ASTM F 1487 *Standard Consumer Safety Performance Specification for Playground Equipment for Public Use and Consumer Product Safety Commission Handbook for Public Playground Safety, 2010*.
- School officials cannot use chromated copper arsenate or creosote-treated wood to construct or install playground equipment, landscape structures, or other structures.

Costs

LHOs perform playground inspections when schools replace existing equipment or construct a new playground on an existing school site. Depending on the size and the nature of the equipment, the time to conduct these inspections would vary. When surveyed, LHOs explained that they already perform these inspections, but it might take additional time with the requirements in the proposed rule language. School officials indicated zero additional labor hours incurred by these proposed rules.

Table 46: Playground Inspections: Additional LHO Hours

	Hourly Wage	Hours	Annual Cost
Min.	$40	0	$0
Max.	$105	3	$315

Table 47: Playground inspections: LHO hourly fees

	Hourly Wage	Hours	Annual Cost
Min.	$100	0	$0
Max.	$250	3	$750

Table 48: Total Labor Costs

Labor Description	Min.	Max.
Total Costs to LHO without fee recovery	$0	$315
Total Costs to LHO with fee recovery	$0	$0
Total costs to schools if charged LHO Fee	$0	$750
Total costs to schools if not charged LHO Fee	$0	$0

WAC 246-370-140 Specialized Rooms

Formerly WAC 246-366-140[33]

WAC 246-366-140 mentions minimum health and safety standards for chemical laboratories. WAC 246-370-150 created the definition of a "specialized room" to include more than just chemistry laboratories. Specialized rooms serve as classrooms with a specific function that uses equipment, furniture, or supplies not found in a standard classroom that pose a potential health or safety risk. This definition may include, but is not limited to, a career and technical education room, a laboratory, an art room, or a health room. These types of rooms could require special ventilation and permit temperatures outside of a normal classroom range.

New requirements from 246-370-140

- Requires emergency eye wash and showers in specialized rooms, not just installing them at the time of new construction
- Requires single-use soap and towels in hand-washing facilities
- Adds the Washington State Labor and Industry requirements for emergency eye wash and shower installation and fixture requirements
- Prohibits shock-sensitive and lethal at low-concentration compounds
- Requires safety procedures for students
- Provides personal protective equipment
- Requires installation of appropriate ventilation equipment for specialized room activities that produce air contaminants
- Adds specific requirements, such as showers and bathrooms, for school facilities that have health rooms
- Includes emergency shut off for gas and electricity in new construction

Costs

We estimated construction costs based on basic expected costs with assumptions that there could be at minimum ceiling work and floor work for all these installations. Some assumptions were made about electrical, plumbing, and parts costs. Not all schools will need to incur these costs, so a total school cost is indeterminate.

[33] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-140&pdf=true (Accessed 4/2025)

Table 49: Construction: One Time Cost

Goods	Construction Cost	City Capacity Fee	Total
Emergency Eye Wash Install	$4,000	$0	$4,000
Emergency Shower Install	$6,000	$0	$6,000
Source Capture Ventilation	$20,000	$0	$20,000
Handwashing Sink	$3,000	$1,370	$4,370
Bathroom - Toilet	$5,000	$4,100	$9,100
Bathroom - Urinal	$5,000	$3,420	$8,420
Emergency Shut Off Valves: Gas	$5,000	$0	$5,000
Emergency Shut Off Valves: Electric	$2,500	$0	$2,500

WAC 246-370-150 Variances and Emergency Waivers

Formerly WAC 246-366-150[34]

This section of the rule outlines how a school official can request an exception to the rule requirements. The request must show how the alternative to the rule still meets the intent.

New requirements from WAC 246-370-150

- Requires an LHO to approve or deny a variance within 60 days of receiving a complete variance packet
- Allows an LHO to issue an emergency waiver in an instance where a school might have to temporarily use a facility not regularly used as a school
- Allows an LHO to permit a school to remain in operation during an imminent health hazard event if safe to do so

Costs

Table 50: Labor Variances: Additional LHO Hours

	Hourly Wage	Hours	Annual Cost
Min.	$40	10	$400
Max.	$105	10	$1,050

Table 51: Labor Variances LHO Fees

	Hourly Wage	Hours	Annual Cost
Min.	$100	10	$1,000
Max.	$250	10	$2,500

Table 52: Total Annual Additional Labor Costs

Labor Description	Min.	Max.
Total Costs to LHO without fee recovery	$400	$1,050
Total Costs to LHO with fee recovery	$0	$0
Total costs to schools if charged LHO Fee	$1,000	$2,500
Total costs to schools if not charged LHO Fee	$0	$0

[34] https://app.leg.wa.gov/WAC/default.aspx?cite=246-366-150&pdf=true (Accessed 4/2025)

Implementation Recommendations

The School Environmental Health and Safety Rule Technical Advisory Committee developed an implementation plan using a phased approach. The intent behind this approach balances student health and safety with cost mitigation. The first phase includes sections that did not make substantive changes to the rule, set out basic WAC structures (such as definition and applicability sections), and required the development of plans, such as the extreme temperature readiness plan. Phase two focuses on activities that require collaboration between school officials and local health jurisdictions, such as inspections and assessments. The final phase brings schools into full implementation, including new rule requirements such as specialized rooms.

In addition to the phased approach, the committee stack ranked the requirements in each section or subsection of rule from 1 to 12 to prioritize the greatest health and safety benefits for students (See **Appendix D: Priority Rank for Implementation**). A ranking of 1 indicates the greatest health priority, while items marked as a 12 are primarily process related and have no direct impact on the health and safety of students.

In this portion of the report, committee implementation recommendations are organized by phase and section. Priority ranking is located to the third column of tables 1, 6, and 9 below. This number identifies the overall stack rank based solely on health and safety benefits. The fourth column describes the purpose for the change. The costs for implementation of each section are listed in the subsequent tables organized by item and task. Given the variability in local health jurisdiction programs, and the differences in school district infrastructure and practices, cost information is set out in a range of minimum to maximum costs. Page 2 of *Tab 06_WAC 246-370 School Rule Report_Fiscal Analysis* provides details of the Board's cost assumptions used to calculate the cost to implement the rule.

Table 1: Phase One

Item #	Rule Section
1	070(1) Indoor Quality and Ventilation
2	070(3) Indoor Quality and Ventilation

Table 2: Initial Cos

Item #	Task
1	Develop In
1	Develop Int
2	Develop Ra
3	Develop Ex
8	Update Gu

The first column (Item #) in the Phase table of each section corresponds with the first column in each of the cost tables.

Phase One: Planning

1

Table 1: Phase One Section Implementation by Priority

Item #	Rule Section	Priority	Description	Estimated Cost
1	070(1) Indoor Air Quality and Ventilation	4	Describes required components of an indoor air quality plan	See Table Below
2	070(3) Indoor Air Quality and Ventilation	4	Describes requirements for a radon testing plan	See Table Below
3	080(1) Temperature	8	Describes the requirements for developing an extreme temperature readiness plan	See Table Below
4	080(2) Temperature	8	Describes collaboration between school official and local health officer	No Cost
5	050(1)-(9) General Building Requirements	9	Describes existing requirements for school facilities under construction	See Table Below
6	001 Purpose	12	Describes existing requirements for school facilities under construction	No cost
7	010 Applicability	12	Description of what types of facilities this rule applies to and exemptions	No cost
8	015(1)-(4) Good Safety Practice and Guidance	12	Describes how good safety practices are developed, maintained, and updated	See Table Below
9	090 Noise	12	Describes requirements for ensuring safe noise levels within a school facility	No cost
10	100 Lighting	12	Describes requirements for ensuring healthy lighting levels within a school facility	No cost
11	170 Severability	12	Describes the limitations of chapter application when any element is found to be invalid	No cost
12	005 Definitions	12	Includes all terminology associated with the chapter once all phases have been implemented	No cost

Table 2: Initial Costs

Item #	Task	Min	Max
1	Develop Indoor Air Quality Plan	$344	$4,288
1	Develop Integrated Pest Management Plan	$0	$1,340
2	Develop Radon Plan	$0	$1,340
3	Develop Extreme Temperature Readiness Plan	$65	$1,330
8	Update Good Safety and Practices Guide	N/A	$68,243
	Total	**$409**	**$76,541**

Table 3: Annual Costs

Item #	Task	Min	Max
1	Annual Implementation of Indoor Air Quality Plan	$0	$9,112
	Subtotal	**$0**	**$9,112**
With Integrated Pest Management			
1	Integrated Pest Management Plan with Dedicated Staff	$215	$2,052
	Total	**$215**	**$11,164**
1	Integrated Pest Management Plan without Dedicated Staff	$8,600	$68,400
	Total	**$8,600**	**$77,512**

Table 4: Five-Year Costs

Item #	Task	Min	Max
2	Implement Radon Plan Every Five Years	$43	$6,700
2	Consumables for Radon Testing Every Five Years	$12	$1,392
8	Update Good Safety and Practices Guide	N/A	$43,138
	Total	**$55**	**$51,230**

Table 5: One-Time Costs

Item #	Task	Min	Max
5	Install of Backflow Device	$7	$32
5	Backflow Device	$9	$130
	Total	**$16**	**$162**

Phase Two: Collaboration

2

Table 6: Phase Two Section Implementation by Priority

Item #	Rule Section	Priority	Description	Estimated Cost
13	040 Routine Inspection	2	Describes responsibilities of local health officer for ensuring school facilities are inspected according to the requirements and timeline of this section	See Table Below
14	120 Imminent Health Hazard Procedure	3	Describes requirements for identifying, responding to, and communicating imminent health hazards	See Table Below
15	130(1)(a) Playgrounds	5	Describes when consultation with local health officer is required	See Table Below
16	130(1)(c)-(2)(f) Playgrounds	5	Describes expectations for local health officials for the notification and inspection of playground plans and equipment	Included in item 15
17	030 Construction Plan Review New, Alterations, and Portables	7	Describes planning, review, and approval of construction before occupancy	See Table Below
18	020 Site Assessment	10	Describes the requirements for assessing the sites for construction of new school facilities	See Table Below
19	150 Variances and Emergency Waivers	12	Describes a school official's options for requesting a variance or emergency waiver	See Table Below
20	160 Appeals	12	Describes process for submitting and reviewing appeals	No cost

Some, but not all, local boards of health require cost recovery. These boards will assess additional fees to the schools.

Table 7: Cost Per Task

Item #	Task	Min	Max
13	Routine School Inspection: Labor Hours	$40	$1,008
15	Playground Inspections: LHO Cost – No Cost Recovery	$0	$315
15	Playground Inspections Fee: School Cost Charged by LHO – Required Cost Recovery	$0	$750
17	Construction Plan Review: Labor Hours	$0	$13,400
18	ASTM Phase 1 Site Assessment: Vendor Cost	$1,400	$5,000
18	ASTM Phase 2 Site Assessment: Vendor Cost	$10,000	$30,000
18	Site Assessment: LHO Cost – No Cost Recovery	$120	$1,260
18	Site Assessment Fee: School Cost Charged by LHO – Required Cost Recovery	$300	$3,000
18	Site Assessment: School Labor Cost	$96	$26,600
	Total	**$11,956**	**$81,333**

Table 8: Annual Costs

Item #	Task	Min	Max
13	Training – Routine Inspections	$168	$4,998
14	Imminent Health Hazard LHO Consulting	$40	$10,500
19	(1) Variance - LHO Cost – No Cost Recovery	$400	$1,050
19	(2) Variance - School Cost Charged by LHO – Required Cost Recovery	$1,000	$2,500
	Total Including (1) Variance – No cost recovery	**$608**	**$16,548**
	Total Including (2) Variance – required cost recovery	**$1,208**	**$17,998**

Phase Three: Full Implementation

3

Table 9: Phase Three Section Implementation by Priority

Item #	Rule Section	Priority	Description	Estimated cost
22	110 Injury Prevention	1	Describes requirements for mitigating physical and chemical injury and the spread of disease through permitted animals in school facilities	See Table Below
23	11 070(2) Indoor Air Quality and Ventilation	4	Describes requirements to control and ventilate air contaminants	Costs Included in section Phase 1 070(1)
24	070(4)-(9) Indoor Air Quality and Ventilation	4	Describes airborne contaminants and ventilation requirements for controlling them	See Table Below
25	130(1)(b) Playgrounds	5	Describes school officials' responsibilities for installation, maintenance, and operation of playground equipment	Costs assessed in Section Phase 2 130(1)(a)
26	130(3) Playgrounds	5	Describes prohibited chemical treatment of playground equipment	Costs assessed in Section Phase 2 130(1)(a)
27	140 Specialized Rooms	6	Describes requirements for specialized rooms	See Table Below
28	080(1)(a)-(b) Temperature	8	Describes parameters for use when implementing an extreme temperature readiness plan	Indeterminate Cost
29	050(10)-(11) General Building Requirements	9	Describes new requirements for school facilities under construction	Costs assessed in Phase 3 140 or required under building code
30	060 Showers and Restrooms	11	Describes requirements for installing showers and restrooms in new construction	No Cost

Table 10: One Time Costs: Labor

Item #	Task	Min	Max
24	Chemical and Cleaning Supply Storage	$0	$4,288
24	Animal Safety Plan	$0	$16,080
24	Develop CO_2 Monitoring Plan	$215	$1,340
	Total	**$215**	**$21,708**

Table 11: Annual Costs: Labor

Item #	Task	Min	Max
24	Chemical and Cleaning Supply Storage: Labor	$43	$1,340
24	Increased Utility Rates: Consumable Goods	$10	$7,347
24	Increase in Filter Size: Consumable Goods	$66	$36,731
24	1st Year CO_2 Monitoring: Labor	$1,075	$26,800
	1st Year Total	**$1,194**	**$72,218**
24	2+ Year CO_2 Monitoring: Labor	$860	$23,450
	2+ Year Total	**$979**	**$68,868**

Table 12: Every 15 years: Trade Services

Item #	Task	Cost (per sq ft)	Small School	Average School	Large School
24	Test and Balance	0.81	929 sq ft	77,391 sq ft	367,301 sq ft
	Total		**$753**	**$62,687**	**$297,514**

Table 13: Cost Per Task If Task is Required

Item #	Task	Construction Cost	City Capacity Fee	Per Linear Foot	Min	Max	Total
27	Emergency Eye Wash Install	$4,000	$0				$4,000
27	Emergency Shower Install	$6,000	$0				$6,000
27	Source Capture Ventilation Install	$20,000	$0				$20,000
27	Handwashing Sink Install	$3,000	$1,370				$4,370
27	Bathroom - Toilet Install	$5,000	$4,100				$9,100
27	Bathroom - Urinal Install	$5,000	$3,420				$8,420
27	Emergency Shut Off Valves: Gas Install	$5,000	$0				$5,000
27	Emergency Shut Off Valves: Electric Install	$2,500	$0				$2,500
24	Routine Ventilation Inspection: Labor				$86	$1,072	
24	Portable Carbon Dioxide Sensor Install				$170	$3,425	
24	Fixed Carbon Dioxide Sensor Install				$2,000	$2,500	
22	Fall Protection Guards Install			$350			

Discussion and Concerns

Throughout the rule development process, the technical advisory committee members discussed and identified several issues and challenges. Many of these issues exceed the scope of the Board's authority to address, but the Board found it important to highlight committee member concerns for policy makers. These items, summarized below, highlight school and public health system challenges across Washington State.

Energy-efficiency, climate change, and student health

Washington's clean-buildings rule aims to reduce greenhouse gas emissions by improving energy efficiency in schools. However, strategies such as reducing HVAC run-times can compromise indoor air quality, affecting student health and learning—especially during the cold and flu season and for those with asthma. Balancing energy goals with healthy environments is particularly challenging for underfunded schools with aging infrastructure. Stakeholders emphasize the need for collaboration across sectors to ensure health-focused ventilation remains a priority. Additionally, misalignment between the rule's five-year performance cycles and local funding timelines, along with unclear compliance penalties, creates further strain—especially for private and charter schools and rural and small districts. Committee members encourage policymakers to allow flexibility in the clean building performance standards for schools to account for changing environmental conditions, enabling schools to better balance energy efficiency goals with health needs during periods of elevated infection risk.

Committee members identified the need for clean-buildings requirements to allow for fluctuating environmental conditions as an important way policymakers might enable schools to dynamically balance HVAC efficiency targets with health considerations during periods of higher infection risks, increased thermal demands, or other air quality concerns as they arise. Schools already experience increased environmental hazards and rising operating costs due to our changing climate, which demonstrates the necessity to resolve this tension between health and efficiency as quickly as possible without compromising the underlying policy goals. The clean buildings rule allows performance-path options and appeals for alternate compliance plans but lacks clear deadlines and penalty guidance. Private, charter, rural, and small schools worry that they'll have to prioritize paying fines over investing in classroom resources.

Committee members commented that as climate risks intensify, these concerns are magnified. More frequent and severe heatwaves, wildfire smoke events, and shifts in pest populations are expected to place additional strain on school infrastructure. In response to rising outdoor risks, students are likely to spend more time indoors—yet tighter buildings, designed for energy efficiency, may trap air contaminants and require increased pesticide use due to expanding pest ranges. This creates a direct tension between compliance with the Clean Buildings Performance Standard and the school health and safety rule. Schools may need to increase ventilation, air conditioning, or filtration capacity to protect health, even when those measures conflict with energy efficiency targets. Balancing climate resilience, student health, and energy goals will require coordinated solutions that do not force schools to choose between safety and sustainability.

Prioritizing student health, cost savings, mold and pest prevention

Keeping school air clean and dry is essential for health. Proper ventilation, temperature control, and moisture checks prevent mold, pests, and exposure to toxins. When districts update HVAC systems and seal buildings correctly, they often save on utility bills and repair costs. Many schools already run pest-management plans and inspect for damp spots, but those efforts may not be included in state funding formulas, despite their potential to lower long-term operating expenses. The committee recognized that some larger school districts have expertise that can be shared with smaller districts or private schools. However, limited awareness and communication between schools reduces opportunities for identifying the need for assistance or sharing expertise between districts or among public and private schools.

Local public health varies in program capacity, services, and fee/funding approach

Washington's thirty-five local health jurisdictions vary significantly in their capacity to support school health and safety programs. While twelve jurisdictions operate full programs, fourteen offer limited or developing support, and nine have no formal school-based program at all. Some charge school's inspection fees, while others use Foundational Public Health Services (FPHS) or other funds to subsidize or offset costs. This creates regional disparities in the level of environmental health services available to schools, leading to unequal protections for students across the state.

The difficulty of maintaining a skilled, stable workforce drives much of this variability. The formation and maintenance of a school environmental health program requires consistent funding for staff positions that demand a broad and specialized knowledge base. This steep learning curve, combined with high public health turnover and limited dedicated funding, puts jurisdictions at risk of losing vital capacity. Without consistent funding for trained staff and trainers, local health agencies may be unable to provide the technical support schools need to meet new standards—undermining implementation of the rule, especially in underserved areas. Reductions to Foundational Public Health Services funding may lead to local health jurisdictions having to pare back on school environmental health and safety work to focus limited funding on other public health priorities.

Funding-model barriers, levy dependence, and school-type differences

The state's prototypical funding model pays schools based on student headcount, not building size, condition, or operating costs. Its assumptions about average facility needs and the cost of staff fall well below what many schools require. When student enrollment drops, budgets shrink while day-to-day and long-term maintenance require the same or an increased investment to maintain aging buildings and systems. Public school districts rely on state and local funding formulas and levies. Relying on local levies and property taxes to bridge the gap between state and local funding leads to inequities in district funding and building maintenance. Districts with a more financially stable and higher tax base may pass measures more easily than those with a more limited tax base.

Additionally, though charter schools typically receive the same per-student state allocation, they are unable to access local property tax levies and must rely on small grants or higher-interest bank loans. Charter schools also do not have dedicated facilities funding, so they may struggle to implement school environmental health and safety regulations and must divert funds from operational funds. Charter schools, like small or rural schools, typically have limited maintenance teams that lack specialized expertise, making implementation of health and safety rules difficult. Charter schools have advocated to be included in technical assistance programs, environmental health training resources, and regional maintenance support networks.

Private School Funding Challenges in Meeting Government Facility Mandates

Private schools rely primarily on enrollment-driven revenue through tuition, endowments, and donations. These revenue streams are sensitive to enrollment fluctuations and must be balanced against the economic realities of the communities they serve. As a result, private schools often lack the flexibility to raise tuition quickly or substantially enough to offset the costs associated with new government facility mandates.

Unlike public schools, private institutions cannot levy local taxes and generally have limited or no access to state funding streams or grant programs. This leaves many private schools without the financial support needed to comply with newly introduced environmental health and safety regulations.

In addition to financial constraints, private schools often operate with lean administrative teams. Many do not employ full-time facility managers, and some do not own their buildings, which further complicates the process of implementing mandated changes. Requirements involving facility upgrades, detailed inspections, and extensive paperwork and reporting place a significant strain on already limited staff capacity.

Together, these financial and operational limitations make it difficult for private schools to meet new regulatory standards in a timely and sustainable way.

Workforce capacity and funding stability

Schools and local health jurisdictions have challenges with workforce retention and recruitment. School maintenance and custodial teams may lack training or expertise for HVAC troubleshooting or mold cleanup. Based on feedback from the committee, schools and jurisdictions struggle to retain skilled workers due to the opportunities for better pay in other industries. Many schools lack resources to identify emerging health issues on site. Jurisdiction, which may charge fees to operate programs, may not have governing body support to charge or increase fees. Stable state funding may enable local health jurisdictions to not be fully reliant on a fee-for-service model to provide support to schools.

Small-school burdens and capacity constraints

Small and rural districts experience additional challenges in funding and workforce capacity related to maintenance teams. Their remote locations make it hard to share technical help regionally. Depending on local levy success, and bond capacity, school boards may need to prioritize funding for student programming over infrastructure needs.

Lead in drinking water

The committee identified several issues with the requirements for lead testing in schools. The current requirements outlined in the Lead in Water Remediation Grant limit who can complete the testing and specify that the funds available are for reimbursement only. LHJs are not approved to complete water testing in schools. Moreover, funds for replacing fixtures are limited to like-for-like, meaning that a modern, practical bottle filler fixture cannot replace a bubbler-type fountain if using grant funds. Complications have surfaced with the remediation process. Occasionally, the remediation increases lead levels due to improper flushing of pipes or not replacing the pipes or the valves that connect the fixture to the plumbing in the wall.

Gaps and emerging school models

During the development process, Board staff and some committee members toured school facilities, including an emerging model: outdoor schools. Outdoor schools are programs, both public and private, that hold classes outdoors most of the time. The current and proposed rules do not directly address these types of schools. The Board needs additional research to determine the best approach for ensuring student health and safety at these school types.

Staff also identified residential boarding schools for additional review. In Washington state, both public and private residential boarding schools have dormitories. While the school facility must meet the standards outlined in the school rules the residential spaces may not be subject to the rule. The Board needs to determine if a separate agency takes responsibility for ensuring health and safety compliance.

Finally, committee members shared concerns about providing appropriate support for schools owned and operated by sovereign Tribal nations. There are nine schools operated by Tribes in the state, and the committee members and Board staff found it important to elevate the concern around appropriate funding for the Tribal schools to ensure health and safety measures.

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Appendices

Contents

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Appendix A: Readiness Plans

1. School Indoor Air Quality Plan

Background

According to EPA, indoor air pollution is among the top five environmental risks to public health. Indoor Air Quality (IAQ) problems in schools may increase respiratory infections, asthma, coughing, eye irritation, headaches, allergic reactions, and other adverse health effects.

Improving IAQ in schools is vital to the comfort and health of students and staff, promotes positive educational outcomes, and decreases school absenteeism.

Purpose of a School IAQ Plan

WAC 246-370-070 requires Washington schools to adopt a written IAQ plan. An IAQ plan refers to a set of written procedures and practices that schools or districts can use to prevent and control IAQ problems.

EPA IAQ Tools for Schools provides model IAQ plans.

Key Points of a School IAQ Plan

- Addresses IAQ training for staff
- Designates key school staff to oversee the IAQ plan
- Periodic walkthrough inspections of the school facilities
- Cleaning and maintenance that addresses dust, mold, and other pollutants
- Chemical management that includes proper storage and disposal of chemicals
- Preventive maintenance including regular inspection of heating, ventilation, and cooling systems to ensure optimal performance
- Procedures to protect students and staff from dust and contaminants during building renovations and construction activities
- A policy for animals and plants
- Responding to complaints and follow-up actions
- Plans to address toxic materials such as mold, asbestos, lead, radon, pesticides, and mercury
- Plans to address poor ventilation, elevated indoor contaminant levels, such as airborne viral outbreaks, and poor outdoor air quality

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

2. Radon in Schools

Background

Radon is a colorless, odorless radioactive gas that occurs from the breakdown of the natural element uranium commonly found in rocks and soil. People are exposed to radon gas as it moves though soil and seeps into buildings, including homes and schools where it can become trapped and concentrate to unhealthy levels.

Exposure to radon gas can cause lung cancer. The EPA estimates that radon gas causes 21,000 lung cancer deaths each year making it the second leading cause of lung cancer in the US.

The EPA estimates that more than 70,000 schoolrooms in use today have high radon levels and nearly one in five schools in the nation has at least one schoolroom that exceeds the recommended action level of 4.0 pCi/L to reduce radon.

Testing is the only way to know if radon gas levels are high enough to cause health problems. Testing is relatively simple and inexpensive. The EPA recommends all schools test for radon gas.

Where radon is found at high levels, schools may need to take recommended steps, such as hiring a certified radon mitigation professional, training school staff to identify radon risks, and learning how to maintain radon reduction.

Purpose of a School Radon Plan

A radon plan will include minimum testing requirements for a school or district to meet Chapter 246-370-070 (3) WAC. A well-written plan can help schools determine if radon levels require a retest or action to reduce radon at their school.

Key Points of a School Radon Plan

- Plan written by school to meet their specific needs
- Help ensure testing meets requirements, standards, and protocols
- Help ensure proper steps are taken to reduce radon if needed

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

3. School Carbon Dioxide Monitoring and Mitigation Plan

Background

The U.S. Department of Energy has linked bringing adequate outdoor air into classrooms with improved attendance, reduced disease transmission, and better performance for students. Indoor air pollutants in schools include, but are not limited to, dust, pest allergens, infectious disease particles, and emissions from school program activities. Outdoor air flowing through indoor spaces can dilute or remove these and other pollutants.

However, the rate of outdoor air flowing into a room is difficult to measure. Carbon dioxide (CO_2) levels are easier to measure and can be used to approximate outdoor air flow rates. The amount of CO_2 in a classroom increases as occupants exhale. More CO_2 in a classroom may indicate a lack of fresh outdoor air flowing in.

To increase outdoor air, schools may open doors and windows or increase mechanical ventilation. Assessing ventilation through CO_2 level measurement can be especially important in older schools with inefficient or no mechanical ventilation systems.

In addition to outdoor air, schools should control indoor air pollutants and provide filtered air. Appropriate filters can remove particles like wildfire smoke, dust, and pollen. To control indoor air pollutants, schools can choose safer cleaning chemicals, avoid fragranced items, and take measures to prevent the spread of respiratory viruses.

Purpose of a CO_2 Monitoring and Mitigation Plan

A monitoring and mitigation plan outlines how a school or district will measure CO_2. The plan will include the following:

- Specific actions a school can take when indoor CO2 levels begin to rise above recommended levels
- Minimum requirements for a school or district that must meet Chapter 246-370-070 (1)(d) and (7)(b)(iii) WAC for ongoing CO_2 concentration monitoring

Key Points of a CO_2 Monitoring and Mitigation Plan

- Specifications for a CO_2 monitoring device
- How, where, and when to measure CO_2
- Recommended CO_2 levels to approximate enough outdoor air ventilation
- Strategies to increase outdoor air ventilation
- Roles and responsibilities

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

4. School Integrated Pest Management Plan

Background

Pests can pose big problems in schools. Mice and cockroaches can trigger asthma, mice and rats transmit infectious diseases, and termites can damage structures making them unsafe. However, pesticides can harm student health and the environment, and they pose risks to children's developing bodies.

Integrated Pest Management (IPM) is a well-established method to control pests by removing sources of food, water, and shelter. When necessary, schools may use the least toxic chemical pesticide. An IPM works to exclude pests from the building and surrounding area by making structural improvements, keeping facilities clean, doing repairs, and educating occupants. An IPM can help schools protect the health and safety of students and staff while reducing costs over time.

Purpose of a School IPM Plan

An IPM plan outlines how a school or district prevents and excludes pests and when it will have to use pesticides. It includes minimum requirements for a school or district to meet Chapter 246-370-070 (1)(c) WAC. It also incorporates best practices to achieve the health and financial benefits of an IPM.

Key Points of a School IPM Plan

- A school or district IPM policy statement
- Roles and responsibilities of a designated coordinator, administrators, and all staff
- Monitoring procedures and pest population thresholds for action
- Prevention and control methods
- Training and communication resources for staff, students, and parents
- Expectations and agreements with contractors
- Links to Washington pesticide regulations

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

5. Extreme Temperature Readiness Plan

Background

Extreme heat and cold events are expected to last longer and become more frequent and intense as the climate changes. With rising temperatures, school buildings are heating up, and many are without air conditioning.

A 2020 report from the Government Accountability Office (GAO) estimated 36,000 public schools nationwide were without adequate air conditioning. An estimated 41% of school districts needed to update or replace heating, ventilation, and air conditioning (HVAC) systems in at least half of their schools. The Washington Office of Superintendent of Public Instruction (OSPI) has said that many schools in our state have inadequate HVAC systems.

Children are especially vulnerable to heat-related illness because they are often active and their bodies are still developing (NIHHIS). In addition to health impacts, children's learning is also affected by warming temperatures. The EPA's 2023 report on the health impacts of climate change on children shows that temperature increases of 2 degrees Celsius are associated with 4% reductions in academic achievement per child relative to average learning gains experienced each school year.

Purpose of an Extreme Temperature Readiness Plan

An extreme temperature readiness plan provides detailed steps a school or district can take to respond to extreme indoor temperatures to protect students. It will include minimum requirements for schools or districts to meet Chapter 246-366-090 WAC.

Key Points of an Extreme Temperature Readiness Plan

- How the school monitors indoor temperatures
- Steps to reduce indoor heat and improve ventilation in classrooms
- Elevated indoor temperature to consider action
- Extreme indoor temperature to consider possible facility or room closures
- Staff training to recognize and prevent heat stress and heat illness
- A communication policy to notify parents or guardians and dismiss students early due to extreme temperature

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Appendix B: Environmental Health Specialist Salaries

Table 1: Small jurisdictions (less than 50,000 people)

	Min	Max
1	$62,467	$79,726
2	$55,120	$75,983
3	x	$88,000
4	x	x
5	x	x
6	$51,048	$72,576
7	$71,739	$93,538
8	$61,716	$83,868
9	x	x
10	$60,240	$79,380
11	$69,023	$96,762
12	$59,062	$70,433
13	$70,768	$96,826

Table 2: Medium jurisdictions (50,000 to 99,999 people)

	Min	Max
14	$58,452	$86,064
15	$55,000	$70,000
16	$56,812	$91,410
17	$56,139	$80,350
18	$60,936	$86,077
19	$55,728	$81,852
20	$52,531	$62,784

Table 3: Large jurisdictions (100,000 to 249,999 people)

	Min	Max
21	$62,556	$83,831
22	$55,908	$78,480
23	$48,499	$62,186
24	$78,042	$99,278
25	$64,667	$103,750
26	$56,784	$101,616
27	$53,124	$91,368
28	$59,964	$106,884
29	$64,666	$84,374
30	$58,219	$85,467
31	$61,835	$94,341
32	$65,645	$97,973

Table 4: Extra-large jurisdictions (750,000 people or more)

	Min	Max
33	$100,573	$127,482
34	$52,395	$70,221

Table 5: Overall Salary Ranges

	Min	Max
All jurisdictions	$48,499	$127,482
Mean	$61,322	$86,545
Median	$59,513	$85,467

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

Appendix C: Construction Cost Estimates

1. Typical Elementary School Construction Cost Per Square Foot (Mechanical Only)

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376
www.hargis.biz

Typical Elementary School Construction Cost Per Square Foot (Mechanical Only)

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64,000	**OVERHEAD & PROFIT**	15%

new construction - mechanical summary	subtotal	OH&P	total	cost per square foot
code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)				
Mechanical Only (Division 23, D30)	$3,835,347.31	$575,302.10	$4,410,649.40	$68.92
150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)				
Mechanical Only (Division 23, D30)	$4,026,963.69	$604,044.55	$4,631,008.24	$72.36
Cost Difference	**$191,616**	**$28,742**	**$220,359**	**$3.44**

existing construction - mechanical summary	subtotal	OH&P	total	cost per square foot
existing building - dedicated outside air system - single zone				
Mechanical Only (Division 23, D30)	$855,820.06	$128,373.01	$984,193.07	$15.38
existing building - controls modification - multizone vav system				
Mechanical Only (Division 23, D30)	$267,198.80	$40,079.82	$307,278.62	$4.80
existing building - controls modification - single zone system				
Mechanical Only (Division 23, D30)	$383,358.80	$57,503.82	$440,862.62	$6.89
existing building - controls modification - CO2 sensors				
Mechanical Only (Division 23, D30)	$109,238.80	$16,385.82	$125,624.62	$1.96
existing building - test & balance				
Mechanical Only (Division 23, D30)	$45,308.00	$6,796.20	$52,104.20	$0.81

EXCLUSIONS

1 - Design contingency
2 - Sales tax
3 - Utility charges or upgrades
4 - Escalation

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

2. Code Minimum Ventilation - Dedicated Outside Air System - Multizone System (425 CFM/Classroom)

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.49	31,638	31,638	4,746	36,383
Trailer, Services, Cranes, Rentals Etc.	60	WKS			1,235.85	74,151	74,151	11,123	85,274
Foreman / Non Labor	70	WKS			1,483.02	103,811	103,811	15,572	119,383
Fuel Costs	1	LS			14,830.20	14,830	14,830	2,225	17,055
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.19	11,864	11,864	1,780	13,644
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.62	39,547	39,547	5,932	45,479
SECTION 230512 INDOOR AIR QUALITY - HVAC									
Indoor Air Quality - HVAC	64,000	SF			.06	3,955	3,955	593	4,548
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.25	15,819	15,819	2,373	18,192
SECTION 230548 VIBRATION ISOLATION									
Vibration Isolation	64,000	SF	.93	59,321	.19	11,864	71,185	10,678	81,863
SECTION 230550 SEISMIC CONTROL									
Seismic Control	64,000	SF	.25	15,819	.12	7,909	23,728	3,559	27,288
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.93	59,321	59,321	8,898	68,219

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 230700 MECHANICAL INSULATION									
Mechanical Insulation									
Piping system insulation									
Fiberglass									
3/4" pipe, 1-1/2" wall	1,600	LF	2.45	3,915	4.56	7,296	11,212	1,682	12,893
1" pipe, 1-1/2" wall	490	LF	2.62	1,284	4.77	2,337	3,621	543	4,164
1-1/4" pipe, 1-1/2" wall	650	LF	2.85	1,856	5.01	3,253	5,109	766	5,875
1-1/2" pipe, 1-1/2" wall	0	LF	2.99		5.01				
2" pipe, 1-1/2" wall	350	LF	3.30	1,155	5.28	1,847	3,002	450	3,452
2-1/2" pipe, 1-1/2" wall	300	LF	3.53	1,060	5.56	1,668	2,729	409	3,138
3" pipe, 1-1/2" wall	250	LF	3.70	924	5.90	1,474	2,398	360	2,757
4" pipe, 1-1/2" wall	140	LF	4.20	588	7.17	1,004	1,592	239	1,831
6" pipe, 1-1/2" wall	0	LF	4.98		9.08				
Elastomeric									
1" pipe, 1" wall	450	LF	4.19	1,885	6.80	3,059	4,944	742	5,686
Duct system insulation									
Duct Wrap	25,488	SF	.23	5,985	2.60	66,149	72,133	10,820	82,954
Duct Liner	10,000	SF	2.94	29,413	6.07	60,680	90,093	13,514	103,607
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support - Phased	64,000	SF			.31	19,774	19,774	2,966	22,740
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF	.02	1,582	.19	11,864	13,446	2,017	15,463
SECTION 230820 SYSTEM O&M MANUALS									
System O&M Manuals	64,000	SF	.02	1,582	.06	3,955	5,537	830	6,367
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	4.33	276,830	6.18	395,472	672,302	100,845	773,148

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 230915 VARIABLE FREQUENCY DRIVES									
Variable Frequency Drives									
Variable Frequency Drives, Enclosed (NEMA 1), 460V									
10 HP	2	EA	3,676.65	7,353	858.92	1,718	9,071	1,361	10,432
SECTION 231123 NATURAL GAS PIPING									
Natural Gas Piping									
Seismic Gas Shut-Off Valve									
Seismic Gas Shut-Off Valve	1	EA	370.76	371	247.17	247	618	93	711
Schedule 40 Black Steel Piping and Fittings									
3/4", Pipe,stl, sched 40, thrded, W/cplgs, &hngrs 10' o.c.,blk	40	LF	5.17	207	10.07	403	610	91	701
50% Fitting cost, 1 per 8 LF	5	/LF	32.75	164	48.61	243	407	61	468
1", Pipe,stl, sched 40, thrded, W/cplgs, & hngrs 10' o.c.,blk	325	LF	5.41	1,759	11.62	3,776	5,535	830	6,365
50% Fitting cost, 1 per 8 LF	40.625	/LF	39.75	1,615	55.00	2,234	3,849	577	4,427
2", Pipe,stl, sched 40, thrded, W/cplgs, & hngrs 10' o.c.,blk	45	LF	14.77	665	17.30	779	1,443	216	1,660
50% Fitting cost, 1 per 8 LF	5.625	/LF	38.62	217	80.95	455	673	101	773
Misc. Valves & regulators	3	/LF	370.76	1,112	197.74	593	1,705	256	1,961
SECTION 232113 HYDRONIC PIPING SYSTEMS									
Hydronic Water Piping									
Black Steel or Copper, w/hngrs at 10' OC, welded or brazed									
3/4", Copper, brazed	1,600	LF	5.55	8,878	11.16	17,856	26,734	4,010	30,744
Fittings, 1 per 10 LF	160	/LF	4.62	740	52.04	8,327	9,066	1,360	10,426
1", Copper, brazed	490	LF	8.53	4,178	12.54	6,145	10,324	1,549	11,872
Fittings, 1 per 10 LF	49	/LF	10.28	504	61.64	3,021	3,524	529	4,053
1-1/4", Copper, brazed	650	LF	14.09	9,158	14.67	9,534	18,691	2,804	21,495
Fittings, 1 per 10 LF	65	/LF	15.84	1,030	66.96	4,352	5,382	807	6,189
1-1/2", Copper, brazed	240	LF	12.73	3,055	16.37	3,928	6,983	1,047	8,031
Fittings, 1 per 10 LF	24	/LF	23.09	554	76.52	1,837	2,391	359	2,749
2", Copper, brazed	350	LF	22.12	7,743	20.19	7,068	14,810	2,222	17,032
Fittings, 1 per 10 LF	35	/LF	36.30	1,270	88.21	3,088	4,358	654	5,012
2-1/2", Copper, brazed	300	LF	31.51	9,454	27.42	8,226	17,681	2,652	20,333
Fittings, 1 per 10 LF	30	/LF	80.12	2,404	151.98	4,560	6,963	1,044	8,008

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
3", Steel, welded	250	LF	21.01	5,252	39.54	9,884	15,137	2,271	17,407
Fittings, 1 per 10 LF	25	/LF	69.83	1,746	333.73	8,343	10,089	1,513	11,602
Pipe to Pipe Joint, 1 per 10 LF	25	/LF			141.68	3,542	3,542	531	4,073
4", Steel, welded	140	LF	20.82	2,915	45.91	6,428	9,343	1,402	10,745
Fittings, 1 per 10 LF	14	/LF	102.58	1,436	453.83	6,354	7,790	1,168	8,958
Pipe to Pipe Joint, 1 per 10 LF	14	/LF			170.05	2,381	2,381	357	2,738
VAV Run out piping and valves, 1-1/2" & under	68	EA	296.60	20,169	148.30	10,085	30,254	4,538	34,792
Expansion Tanks									
211 Gallon, Bladder Type, B&G B-800SR	1	EA	8,768.36	8,768	556.13	556	9,324	1,399	10,723
Air Separators with flange, removable head									
Combination Air Eliminator/Dirt Separator, 6"	1	EA	15,448.13	15,448	1,235.85	1,236	16,684	2,503	19,187
SECTION 232116 PIPING SPECIALTIES									
Piping Specialties	1	LS	20,000.00	20,000	6,000.00	6,000	26,000	3,900	29,900
SECTION 232120 HYDRONIC VALVES									
Valves	64,000	SF	.10	6,400	.15	9,600	16,000	2,400	18,400
SECTION 232123 HYDRONIC PUMPS									
Hydronic Pumps									
Base Mounted, Close Coupled									
B&G e1531-2GB 200 gpm @ 125' 15 hp	2	EA	7,349.60	14,699			14,699	2,205	16,904
Pump Suction Diffusers, Cast Iron									
4"	2	EA	1,174.06	2,348	370.76	742	3,090	463	3,553
Pump accessories 3", (2) gate valve(s), balancing valve, check valve,	2	EA	3,577.79	7,156	1,237.70	2,475	9,631	1,445	11,076
SECTION 232300 REFRIGERANT PIPING SYSTEMS									
Refrigerant Piping									
ACR Tubing, Copper Type L, 3/8"	400	LF	1.93	771	3.89	1,557	2,328	349	2,678
ACR Tubing, Copper Type L, 3/4"	50	LF	5.01	250	4.80	240	490	74	564

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION	Other	**PREPARED BY** Brian Cawley, P.E.		**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF** 64000		**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 232500 WATER TREATMENT SYSTEMS									
Water Treatment Systems									
Chemical Treatment	3,000	GAL	14.21	42,637			42,637	6,396	49,032
Chemical Pot Feeder	1	EA	926.89	927	494.34	494	1,421	213	1,634
SECTION 233100 AIR DISTRIBUTION									
Air Distribution									
Galvanized Steel Ductwork, 22 gauge									
Installed at 10' to 15'									
Over 5000lbs	42480	LBS	2.47	104,998	12.36	524,989	629,987	94,498	724,485
Flexible Ductwork in 5'-0" lengths, 12"dia ave.	200	EA	19.16	3,831	44.49	8,898	12,729	1,909	14,639
Stainless Steel Ductwork, 18 gauge, Welded									
1000lbs to 2000lbs	1500	LBS	4.94	7,415	14.83	22,245	29,660	4,449	34,109
Silencers	8	EA	4,325.48	34,604	1,235.85	9,887	44,491	6,674	51,164
SECTION 233300 AIR DISTRIBUTION ACCESSORIES									
Air Distribution Accessories									
Volume Dampers and Quadrants									
12x12	100	EA	48.82	4,882	28.42	2,842	7,724	1,159	8,883
24x24	100	EA	140.89	14,089	74.15	7,415	21,504	3,226	24,729
VAV Terminal Units, HW Reheat									
6" Inlet	17	EA	970.14	16,492	118.02	2,006	18,499	2,775	21,274
8" Inlet	3	EA	970.14	2,910	118.02	354	3,264	490	3,754
10" Inlet	17	EA	970.14	16,492	118.02	2,006	18,499	2,775	21,274
12" Inlet	14	EA	1,001.04	14,015	118.02	1,652	15,667	2,350	18,017

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 233400 AIR DISTRIBUTION EQUIPMENT									
Air Distribution Equipment									
Air Handling Units, Budget from Manufacturer	1	LS	596,590.91	596,591	74,151.00	74,151	670,742	100,611	771,353
Centrifigal Fans									
Inline Centrifugal, supply/exhaust booster									
500 CFM, 10" Diameter Connection	3	EA	1,946.46	5,839	451.09	1,353	7,193	1,079	8,272
1,380 CFM, 12" Diameter Connection	3	EA	1,977.36	5,932	673.54	2,021	7,953	1,193	9,146
1,520 CFM, 16" Diameter Connection	1	EA	2,039.15	2,039	673.54	674	2,713	407	3,120
Roof Mounted Upblast - Kitchen 2000 cfm 3/4 HP	2	LS	3,089.63	6,179	270.65	541	6,721	1,008	7,729
SECTION 233700 AIR DEVICES									
Air Devices	64,000	SF	1.85	118,642	.93	59,321	177,962	26,694	204,657
Large Return Grilles 48x36	4	EA	263.24	1,053	53.76	215	1,268	190	1,458
Louvers	325	SF	247.17	80,330	29.66	9,640	89,970	13,495	103,465
SECTION 234100 FILTERS									
Filters, Panel Type, Spare	508	SF	33.99	17,265			17,265	2,590	19,855
SECTION 235100 FLUES AND STACKS									
Flues and Stacks, per Boiler									
Flues and Stacks, per Boiler, AL294C	2	EA	18,537.75	37,076	1,853.78	3,708	40,783	6,117	46,901
SECTION 235200 BOILERS									
Boilers									
Heating water boiler, condensing									
2000 MBH	2	LS	74,151.00	148,302	6,179.25	12,359	160,661	24,099	184,760
Condensate Neutralization Tube	2	EA	308.96		50.00	100	100	15	115

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

code minimum ventilation - dedicated outside air system - multizone system (425 CFM/classroom)

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 238100 PACKAGED HVAC EQUIPMENT									
Packaged HVAC Equipment									
Outdoor Condensing Unit	1	LS	37,075.50	37,076	6,179.25	6,179	43,255	6,488	49,743
1.5 Ton - Ductless Indoor Evap. with Matching Outdoor Cond. Unit	2	EA	3,707.55	7,415	1,853.78	3,708	11,123	1,668	12,791
Condensate Pan Pump	2	EA	247.17	494	123.59	247	742	111	853
SECTION 238200 TERMINAL HEAT TRANSFER EQUIPMENT									
Terminal Heat Transfer Equipment									
Hydronic Fin Tube Units	17	EA	2,039.15	34,666	803.30	13,656	48,322	7,248	55,570
Electric Unit Heater, Commercial, 1.5 kW	14	EA	244.70	3,426	95.78	1,341	4,767	715	5,482
Electric Cabinet Heater, 5 kw	4	EA	2,966.04	11,864	131.00	524	12,388	1,858	14,246
Total Mechanical (Division 23)				1,950,469	656,922	1,884,879	3,835,347	575,302	4,410,649

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

3. 150% Code Minimum Ventilation - Dedicated Outside Air System - Multizone System (635 CFM/Classroom)

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.49	31,638	31,638	4,746	36,383
Trailer, Services, Cranes, Rentals Etc.	60	WKS			1,235.85	74,151	74,151	11,123	85,274
Foreman / Non Labor	70	WKS			1,483.02	103,811	103,811	15,572	119,383
Fuel Costs	1	LS			14,830.20	14,830	14,830	2,225	17,055
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.19	11,864	11,864	1,780	13,644
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.62	39,547	39,547	5,932	45,479
SECTION 230512 INDOOR AIR QUALITY - HVAC									
Indoor Air Quality - HVAC	64,000	SF			.06	3,955	3,955	593	4,548
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.25	15,819	15,819	2,373	18,192
SECTION 230548 VIBRATION ISOLATION									
Vibration Isolation	64,000	SF	.93	59,321	.19	11,864	71,185	10,678	81,863
SECTION 230550 SEISMIC CONTROL									
Seismic Control	64,000	SF	.25	15,819	.12	7,909	23,728	3,559	27,288
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.93	59,321	59,321	8,898	68,219

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 230700 MECHANICAL INSULATION									
Mechanical Insulation									
Piping system insulation									
Fiberglass									
3/4" pipe, 1-1/2" wall	1,200	LF	2.45	2,936	4.56	5,472	8,409	1,261	9,670
1" pipe, 1-1/2" wall	490	LF	2.62	1,284	4.77	2,337	3,621	543	4,164
1-1/4" pipe, 1-1/2" wall	650	LF	2.85	1,856	5.01	3,253	5,109	766	5,875
1-1/2" pipe, 1-1/2" wall	0	LF	2.99		5.01				
2" pipe, 1-1/2" wall	300	LF	3.30	990	5.28	1,583	2,573	386	2,959
2-1/2" pipe, 1-1/2" wall	270	LF	3.53	954	5.56	1,502	2,456	368	2,824
3" pipe, 1-1/2" wall	400	LF	3.70	1,478	5.90	2,358	3,836	575	4,411
4" pipe, 1-1/2" wall	200	LF	4.20	840	7.17	1,434	2,274	341	2,615
6" pipe, 1-1/2" wall	0	LF	4.98		9.08				
Elastomeric									
1" pipe, 1" wall	450	LF	4.19	1,885	6.80	3,059	4,944	742	5,686
Duct system insulation									
Duct Wrap	28,674	SF	.23	6,733	2.60	74,417	81,150	12,173	93,323
Duct Liner	10,000	SF	2.94	29,413	6.07	60,680	90,093	13,514	103,607
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support	64,000	SF			.31	19,774	19,774	2,966	22,740
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF	.02	1,582	.19	11,864	13,446	2,017	15,463
SECTION 230820 SYSTEM O&M MANUALS									
System O&M Manuals	64,000	SF	.02	1,582	.06	3,955	5,537	830	6,367
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	4.33	276,830	6.18	395,472	672,302	100,845	773,148

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 230915 VARIABLE FREQUENCY DRIVES									
Variable Frequency Drives									
Variable Frequency Drives, Enclosed (NEMA 1), 460V									
10 HP	2	EA	3,676.65	7,353	858.92	1,718	9,071	1,361	10,432
SECTION 231123 NATURAL GAS PIPING									
Natural Gas Piping									
Seismic Gas Shut-Off Valve									
Seismic Gas Shut-Off Valve	1	EA	370.76	371	247.17	247	618	93	711
Schedule 40 Black Steel Piping and Fittings									
3/4", Pipe,stl, sched 40, thrded, W/cplgs, &hngrs 10' o.c.,blk	40	LF	5.17	207	10.07	403	610	91	701
50% Fitting cost, 1 per 8 LF	5	/LF	32.75	164	48.61	243	407	61	468
1", Pipe,stl, sched 40, thrded, W/cplgs, & hngrs 10' o.c.,blk	325	LF	5.41	1,759	11.62	3,776	5,535	830	6,365
50% Fitting cost, 1 per 8 LF	40.625	/LF	39.75	1,615	55.00	2,234	3,849	577	4,427
2", Pipe,stl, sched 40, thrded, W/cplgs, & hngrs 10' o.c.,blk	45	LF	14.77	665	17.30	779	1,443	216	1,660
50% Fitting cost, 1 per 8 LF	5.625	/LF	38.62	217	80.95	455	673	101	773
Misc. Valves & regulators	3	/LF	370.76	1,112	197.74	593	1,705	256	1,961
SECTION 232113 HYDRONIC PIPING SYSTEMS									
Hydronic Water Piping									
Black Steel or Copper, w/hngrs at 10' OC, welded or brazed									
3/4", Copper, brazed	1,200	LF	5.55	6,659	11.16	13,392	20,050	3,008	23,058
Fittings, 1 per 10 LF	120	/LF	4.62	555	52.04	6,245	6,800	1,020	7,820
1", Copper, brazed	490	LF	8.53	4,178	12.54	6,145	10,324	1,549	11,872
Fittings, 1 per 10 LF	49	/LF	10.28	504	61.64	3,021	3,524	529	4,053
1-1/4", Copper, brazed	650	LF	14.09	9,158	14.67	9,534	18,691	2,804	21,495
Fittings, 1 per 10 LF	65	/LF	15.84	1,030	66.96	4,352	5,382	807	6,189
1-1/2", Copper, brazed	240	LF	12.73	3,055	16.37	3,928	6,983	1,047	8,031
Fittings, 1 per 10 LF	24	/LF	23.09	554	76.52	1,837	2,391	359	2,749
2", Copper, brazed	300	LF	22.12	6,637	20.19	6,058	12,695	1,904	14,599
Fittings, 1 per 10 LF	30	/LF	36.30	1,089	88.21	2,646	3,735	560	4,296
2-1/2", Copper, brazed	270	LF	31.51	8,509	27.42	7,404	15,913	2,387	18,299
Fittings, 1 per 10 LF	27	/LF	80.12	2,163	151.98	4,104	6,267	940	7,207

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
3", Steel, welded	400	LF	21.01	8,404	39.54	15,815	24,219	3,633	27,852
Fittings, 1 per 10 LF	40	/LF	69.83	2,793	333.73	13,349	16,142	2,421	18,564
Pipe to Pipe Joint, 1 per 10 LF	40	/LF			141.68	5,667	5,667	850	6,517
4", Steel, welded	200	LF	20.82	4,165	45.91	9,183	13,348	2,002	15,350
Fittings, 1 per 10 LF	20	/LF	102.58	2,052	453.83	9,077	11,128	1,669	12,797
Pipe to Pipe Joint, 1 per 10 LF	20	/LF			170.05	3,401	3,401	510	3,911
VAV Run out piping and valves, 1-1/2" & under	68	EA	296.60	20,169	148.30	10,085	30,254	4,538	34,792
Expansion Tanks									
211 Gallon, Bladder Type, B&G B-800SR	1	EA	8,768.36	8,768	556.13	556	9,324	1,399	10,723
Air Separators with flange, removable head									
Combination Air Eliminator/Dirt Separator, 6"	1	EA	15,448.13	15,448	1,235.85	1,236	16,684	2,503	19,187
SECTION 232116 PIPING SPECIALTIES									
Piping Specialties	1	LS	20,000.00	20,000	6,000.00	6,000	26,000	3,900	29,900
SECTION 232120 HYDRONIC VALVES									
Valves	64,000	SF	.10	6,400	.15	9,600	16,000	2,400	18,400
SECTION 232123 HYDRONIC PUMPS									
Hydronic Pumps									
Base Mounted, Close Coupled									
B&G e1531-2GB 200 gpm @ 125' 15 hp	2	EA	7,349.60	14,699			14,699	2,205	16,904
Pump Suction Diffusers, Cast Iron									
4"	2	EA	1,174.06	2,348	370.76	742	3,090	463	3,553
Pump accessories 3", (2) gate valve(s), balancing valve, check valve,	2	EA	3,577.79	7,156	1,237.70	2,475	9,631	1,445	11,076
SECTION 232300 REFRIGERANT PIPING SYSTEMS									
Refrigerant Piping									
ACR Tubing, Copper Type L, 3/8"	400	LF	1.93	771	3.89	1,557	2,328	349	2,678
ACR Tubing, Copper Type L, 3/4"	50	LF	5.01	250	4.80	240	490	74	564

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION	Other	**PREPARED BY** Brian Cawley, P.E.		**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF** 64000		**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 232500 WATER TREATMENT SYSTEMS									
Water Treatment Systems									
Chemical Treatment	3,000	GAL	14.21	42,637			42,637	6,396	49,032
Chemical Pot Feeder	1	EA	926.89	927	494.34	494	1,421	213	1,634
SECTION 233100 AIR DISTRIBUTION									
Air Distribution									
Galvanized Steel Ductwork, 22 gauge									
Installed at 10' to 15'									
Over 5000lbs	47790	LBS	2.47	118,123	12.36	590,613	708,735	106,310	815,046
Flexible Ductwork in 5'-0" lengths, 12"dia ave.	200	EA	19.16	3,831	44.49	8,898	12,729	1,909	14,639
Stainless Steel Ductwork, 18 gauge, Welded									
1000lbs to 2000lbs	1500	LBS	4.94	7,415	14.83	22,245	29,660	4,449	34,109
Silencers	8	EA	4,325.48	34,604	1,235.85	9,887	44,491	6,674	51,164
SECTION 233300 AIR DISTRIBUTION ACCESSORIES									
Air Distribution Accessories									
Volume Dampers and Quadrants									
12x12	100	EA	48.82	4,882	28.42	2,842	7,724	1,159	8,883
24x24	100	EA	140.89	14,089	74.15	7,415	21,504	3,226	24,729
VAV Terminal Units, HW Reheat									
6" Inlet	17	EA	970.14	16,492	118.02	2,006	18,499	2,775	21,274
8" Inlet	3	EA	970.14	2,910	118.02	354	3,264	490	3,754
10" Inlet	0	EA	970.14		118.02				
12" Inlet	31	EA	1,001.04	31,032	118.02	3,659	34,691	5,204	39,895

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 233400 AIR DISTRIBUTION EQUIPMENT									
Air Distribution Equipment									
Air Handling Units, Budget from Manufacturer	1	LS	675,000.00	675,000	74,151.00	74,151	749,151	112,373	861,524
Centrifigal Fans									
Inline Centrifugal, supply/exhaust booster									
500 CFM, 10" Diameter Connection	3	EA	1,946.46	5,839	451.09	1,353	7,193	1,079	8,272
1,380 CFM, 12" Diameter Connection	3	EA	1,977.36	5,932	673.54	2,021	7,953	1,193	9,146
1,520 CFM, 16" Diameter Connection	1	EA	2,039.15	2,039	673.54	674	2,713	407	3,120
Roof Mounted Upblast - Kitchen 2000 cfm 3/4 HP	2	LS	3,089.63	6,179	270.65	541	6,721	1,008	7,729
SECTION 233700 AIR DEVICES									
Air Devices	64,000	SF	1.85	118,642	.93	59,321	177,962	26,694	204,657
Large Return Grilles 48x36	4	EA	263.24	1,053	53.76	215	1,268	190	1,458
Louvers	325	SF	247.17	80,330	29.66	9,640	89,970	13,495	103,465
SECTION 234100 FILTERS									
Filters, Panel Type, Spare	508	SF	33.99	17,265			17,265	2,590	19,855
SECTION 235100 FLUES AND STACKS									
Flues and Stacks, per Boiler									
Flues and Stacks, per Boiler, AL294C	2	EA	18,537.75	37,076	1,853.78	3,708	40,783	6,117	46,901
SECTION 235200 BOILERS									
Boilers									
Heating water boiler, condensing									
2500 MBH	2	LS	81,566.10	163,132	6,179.25	12,359	175,491	26,324	201,814
Condensate Neutralization Tube	2	EA	308.96		50.00	100	100	15	115

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

150% code minimum ventilation - dedicated outside air system - multizone system (635 CFM/classroom)

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 238100 PACKAGED HVAC EQUIPMENT									
Packaged HVAC Equipment									
Outdoor Condensing Unit	1	LS	37,075.50	37,076	6,179.25	6,179	43,255	6,488	49,743
1.5 Ton - Ductless Indoor Evap. with Matching Outdoor Cond. Unit	2	EA	3,707.55	7,415	1,853.78	3,708	11,123	1,668	12,791
Condensate Pan Pump	2	EA	247.17	494	123.59	247	742	111	853
SECTION 238200 TERMINAL HEAT TRANSFER EQUIPMENT									
Terminal Heat Transfer Equipment									
Hydronic Fin Tube Units	17	EA	2,039.15	34,666	803.30	13,656	48,322	7,248	55,570
Electric Unit Heater, Commercial, 1.5 kW	14	EA	244.70	3,426	95.78	1,341	4,767	715	5,482
Electric Cabinet Heater, 5 kw	4	EA	2,966.04	11,864	131.00	524	12,388	1,858	14,246
Total Mechanical (Division 23)				2,058,849	656,922	1,968,115	4,026,964	604,045	4,631,008

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

4. Existing Building - Dedicated Outside Air System - Single Zone

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - dedicated outside air system - single zone

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.12	7,909	7,909	1,186	9,096
Trailer, Services, Cranes, Rentals Etc.	12	WKS			1,235.85	14,830	14,830	2,225	17,055
Foreman / Non Labor	12	WKS			1,235.85	14,830	14,830	2,225	17,055
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.06	3,955	3,955	593	4,548
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.19	11,864	11,864	1,780	13,644
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.93	59,321	59,321	8,898	68,219
SECTION 230548 VIBRATION ISOLATION									
Vibration Isolation	64,000	SF	.06	3,955	.06	3,955	7,909	1,186	9,096
SECTION 230550 SEISMIC CONTROL									
Seismic Control	64,000	SF	.06	3,955	.06	3,955	7,909	1,186	9,096
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.43	27,683	27,683	4,152	31,835
SECTION 230700 MECHANICAL INSULATION									
Mechanical Insulation									
Duct system insulation									
Duct Wrap	3,186	SF	.23	748	2.60	8,269	9,017	1,353	10,369
Duct Liner	1,000	SF	2.94	2,941	6.07	6,068	9,009	1,351	10,361

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - dedicated outside air system - single zone

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support	64,000	SF			.19	11,864	11,864	1,780	13,644
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF	.06	3,955	.06	3,955	7,909	1,186	9,096
SECTION 230820 SYSTEM O&M MANUALS									
System O&M Manuals	64,000	SF	.06	3,955	.06	3,955	7,909	1,186	9,096
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	.62	39,547	.62	39,547	79,094	11,864	90,959
SECTION 233100 AIR DISTRIBUTION									
Air Distribution									
Galvanized Steel Ductwork, 22 gauge									
Installed at 10' to 15'									
Over 5000lbs	5310	LBS	2.47	13,125	12.36	65,624	78,748	11,812	90,561
SECTION 233400 AIR DISTRIBUTION EQUIPMENT									
Air Distribution Equipment									
High Efficiency Heat Recovery Units	17	EA	21,071.24	358,211	4,943.40	84,038	442,249	66,337	508,586
SECTION 233700 AIR DEVICES									
Air Devices	64,000	SF	.25	15,819	.12	7,909	23,728	3,559	27,288
Large Return Grilles 48x36		EA	263.24		53.76				
Louvers	76.2	SF	247.17	18,834	29.66	2,260	21,094	3,164	24,259
SECTION 234100 FILTERS									
Filters, Panel Type, Spare	130	SF	33.99	4,403			4,403	660	5,063
Total Mechanical (Division 23)				470,826	622,190	384,994	855,820	128,373	984,193

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

5. Existing Building - Controls Modification - Multizone VAV System

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - controls modification - multizone vav system

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.11	7,040	7,040	1,056	8,096
Trailer, Services, Cranes, Rentals Etc.	12	WKS			550.00	6,600	6,600	990	7,590
Foreman / Non Labor	12	WKS			550.00	6,600	6,600	990	7,590
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.28	17,600	17,600	2,640	20,240
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.66	42,240	42,240	6,336	48,576
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support	64,000	SF			.44	28,160	28,160	4,224	32,384
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF	.06	3,520	.06	3,520	7,040	1,056	8,096
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	1.65	105,600	.55	35,200	140,800	21,120	161,920
Total Mechanical (Division 23)				110,348		553,671	156,851	267,199	40,080	307,279

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

6. Existing Building - Controls Modification - CO_2 Sensors

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376
www.hargis.biz

existing building - controls modification - CO2 sensors

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.11	7,040	7,040	1,056	8,096
Trailer, Services, Cranes, Rentals Etc.	12	WKS			550.00	6,600	6,600	990	7,590
Foreman / Non Labor	12	WKS			550.00	6,600	6,600	990	7,590
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.28	17,600	17,600	2,640	20,240
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.83	52,800	52,800	7,920	60,720
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support	64,000	SF			.44	28,160	28,160	4,224	32,384
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF	.06	3,520	.06	3,520	7,040	1,056	8,096
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	2.75	176,000	1.10	70,400	246,400	36,960	283,360
Total Mechanical (Division 23)				180,748	553,671	202,611	383,359	57,504	440,863

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - controls modification - CO2 sensors

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** 64000 **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.11	7,040	7,040	1,056	8,096
Trailer, Services, Cranes, Rentals Etc.	12	WKS							
Foreman / Non Labor	12	WKS			550.00	6,600	6,600	990	7,590
SECTION 230505 PROJECT CLOSEOUT AND SYSTEM START UP									
Project Closeout and System Start Up	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230513 ELECTRICAL PROVISIONS									
Electrical Provisions	64,000	SF			.11	7,040	7,040	1,056	8,096
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF							
SECTION 230800 COMMISSIONING SUPPORT									
Commissioning Support	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230810 SYSTEMS TRAINING									
Systems Training	64,000	SF			.06	3,520	3,520	528	4,048
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF	.55	35,200	.55	35,200	70,400	10,560	80,960
Total Mechanical (Division 23)				36,428	553,395	72,811	109,239	16,386	125,625
Unit Cost per Sensor									2,512

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

7. Existing Building - Test & Balance

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - test & balance

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 230500 GENERAL PROVISIONS									
General Provisions									
Permit, Mobilization, Submittals, Bond	64,000	SF			.05	3,200	3,200	480	3,680
SECTION 230510 BASIC MATERIALS AND METHODS									
Basic Materials and Methods	64,000	SF			.05	3,200	3,200	480	3,680
SECTION 230593 TESTING, ADJUSTING AND BALANCING									
Testing, Adjusting and Balancing	64,000	SF			.50	32,000	32,000	4,800	36,800
SECTION 230900 AUTOMATIC TEMPERATURE CONTROLS									
Automatic Temperature Controls	64,000	SF			.05	3,200	3,200	480	3,680
Total Mechanical (Division 23)				1,116	503,688	44,192	45,308	6,796	52,104

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

8. Existing Building - Filters

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - filters

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** NA **OVERHEAD & PROFIT** 25%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
SECTION 234100 FILTERS									
Filters, Panel Type, MERV 8 per classroom, 3 Sets Filters	12.00	SF	5.09	61			61	15	76
Filters, Panel Type, MERV 13 per classroom, 3 Sets Filters	12.00	SF	9.11	109			109	27	137
MERV 8 cost per building SF (based on 900 SF classroom)	$ 0.09	/SF	Assumes minimum 12 filter order, and 3 sets of filters per year.						
MERV 13 cost per building SF (based on 900 SF classroom)	$ 0.16	/SF	Assumes minimum 12 filter order, and 3 sets of filters per year.						
Price Delta	$ 0.07								
Filters, Panel Type, MERV 8 per classroom, 4 Sets Filters	16.00	SF	5.09	81			81	20	102
Filters, Panel Type, MERV 13 per classroom, 4 Sets Filters	16.00	SF	9.11	146			146	36	182
MERV 8 cost per building SF (based on 900 SF classroom)	$ 0.12	/SF	Assumes minimum 12 filter order, and 4 sets of filters per year.						
MERV 13 cost per building SF (based on 900 SF classroom)	$ 0.22	/SF	Assumes minimum 12 filter order, and 4 sets of filters per year.						
Price Delta	$ 0.10								
Utility Cost Delta									
Per yearly BIN Calculation with typical K-12 usage profile for 111,000 SF school:			$ 0.02 /YR						

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

9. Existing Building - Guard Rail System

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

existing building - guard rail system

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	64000	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
C2010 Guardrail System									
Guardrail (without Handrail)									
40" Rail, intermeidate bar, without Handrail	1	LF	154.00	154	150.00	150	304	46	350

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

10. Emergency Eyewash

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

emergency eyewash

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** NA **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 22									
SECTION 224000 PLUMBING FIXTURES									
Plumbing Fixtures									
Fixtures (Includes faucet,fittings,piping & insulation to clg)									
Water Closets, wall mounted with carrier, no tank		EA	3,000.00		930.00				
Urinals		EA	1,000.00		890.00				
Lavs		EA	955.00		880.00				
Sinks		EA	1,200.00		875.00				
Eyewash Stations	1	EA	1,200.00	1,200	800.00	800	2,000	300	2,300
Emergency Shower Stations		EA	1,500.00		700.00				
Mop Sinks, and trim		EA	2,161.00		1,122.50				
Shower, Enclosed HC		EA	2,500.00		600.00				
Electric Water Cooler		EA	2,000.00		600.00				
Hose bibb, Interior and Exterior		EA	350.00		250.00				
Thermostatic mixing valves	1	EA	1,000.00	1,000	480.00	480	1,480	222	1,702
Point of Use TMV		EA	300.00		150.00				
Drain for Emergency Shower		EA	1,200.00		800.00				
Subtotal Division 22				2,200		1,280	3,480	522	4,002

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

11. Emergency Eyewash Shower

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

emergency eyewash shower

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	NA	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 22									
SECTION 224000 PLUMBING FIXTURES									
Plumbing Fixtures									
Fixtures (Includes faucet,fittings,piping & insulation to clg)									
Water Closets, wall mounted with carrier, no tank		EA	3,000.00		930.00				
Urinals		EA	1,000.00		890.00				
Lavs		EA	955.00		880.00				
Sinks		EA	1,200.00		875.00				
Eyewash Stations		EA	1,200.00		800.00				
Emergency Shower Stations	1	EA	1,500.00	1,500	700.00	700	2,200	330	2,530
Mop Sinks, and trim		EA	2,161.00		1,122.50				
Shower, Enclosed HC		EA	2,500.00		600.00				
Electric Water Cooler		EA	2,000.00		600.00				
Hose bibb, Interior and Exterior		EA	350.00		250.00				
Thermostatic mixing valves	1	EA	1,000.00	1,000	480.00	480	1,480	222	1,702
Point of Use TMV		EA	300.00		150.00				
Drain for Emergency Shower	1	EA	700.00	700	800.00	800	1,500	225	1,725
Subtotal Division 22				3,200		1,980	5,180	777	5,957

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

12. Handsink

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

handsink

BASIS OF OPINION	Other	**PREPARED BY**	Brian Cawley, P.E.	**DATE**	January 8, 2025
JOB NUMBER	23100.xx	**COST MODEL SF**	NA	**OVERHEAD & PROFIT**	15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 22									
SECTION 224000 PLUMBING FIXTURES									
Plumbing Fixtures									
Fixtures (Includes faucet,fittings,piping & insulation to clg)									
Water Closets, wall mounted with carrier, no tank		EA	3,000.00		930.00				
Urinals		EA	1,000.00		890.00				
Lavs		EA	955.00		880.00				
Sinks	1	EA	1,200.00	1,200	875.00	875	2,075	311	2,386
Eyewash Stations		EA	1,200.00		800.00				
Emergency Shower Stations		EA	1,500.00		700.00				
Mop Sinks, and trim		EA	2,161.00		1,122.50				
Shower, Enclosed HC		EA	2,500.00		600.00				
Electric Water Cooler		EA	2,000.00		600.00				
Hose bibb, Interior and Exterior		EA	350.00		250.00				
Thermostatic mixing valves		EA	1,000.00		480.00				
Point of Use TMV		EA	300.00		150.00				
Drain for Emergency Shower		EA	700.00		800.00				
Subtotal Division 22				1,200		875	2,075	311	2,386

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

13. Bathroom

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376
www.hargis.biz

bathroom

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** NA **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 22									
SECTION 224000 PLUMBING FIXTURES									
Plumbing Fixtures									
Fixtures (Includes faucet,fittings,piping & insulation to clg)									
Water Closets, wall mounted with carrier, no tank	1	EA	3,000.00	3,000	930.00	930	3,930	590	4,520
Urinals		EA	1,000.00		890.00				
Lavs	1	EA	955.00	955	880.00	880	1,835	275	2,110
Sinks		EA	1,200.00		875.00				
Eyewash Stations		EA	1,200.00		800.00				
Emergency Shower Stations		EA	1,500.00		700.00				
Mop Sinks, and trim		EA	2,161.00		1,122.50				
Shower, Enclosed HC		EA	2,500.00		600.00				
Electric Water Cooler		EA	2,000.00		600.00				
Hose bibb, Interior and Exterior		EA	350.00		250.00				
Thermostatic mixing valves		EA	1,000.00		480.00				
Point of Use TMV		EA	300.00		150.00				
Drain for Bathoom	1	EA	700.00	700	800.00	800	1,500	225	1,725
Subtotal Division 22				4,655		2,610	7,265	1,090	8,355

Appendices

Board of Health Legislative Report

WAC 246-370 School Environmental Health and Safety Rule

June 2025

14. Source Capture Hood

mechanical **cost opinion**

HARGIS
1201 third avenue, ste 600
seattle, washington 98101
206.448.3376

www.hargis.biz

source capture hood

BASIS OF OPINION Other **PREPARED BY** Brian Cawley, P.E. **DATE** January 8, 2025

JOB NUMBER 23100.xx **COST MODEL SF** NA **OVERHEAD & PROFIT** 15%

description	quantity		material cost		labor cost		engineering opinion		
	number	unit	unit cost	total	unit cost	total	subtotal	OH&P	total
DIVISION 23									
SECTION 233100 AIR DISTRIBUTION									
Air Distribution									
Galvanized Steel Ductwork, 22 gauge									
Installed at 10' to 15'									
200lbs to 500lbs	500	LBS	2.00	1,000	10.00	5,000	6,000	900	6,900
SECTION 233400 AIR DISTRIBUTION EQUIPMENT									
Air Distribution Equipment									
Centrifigal Fans									
Inline Centrifugal, supply/exhaust booster									
1,520 CFM, 16" Diameter Connection	1	EA	2,000.00	2,000	2,500.00	2,500	4,500	675	5,175
SECTION 233800 COMMERCIAL HOODS									
Source Capture Process Hood	16	SF	200.00	3,200	200.00	3,200	6,400	960	7,360
Subtotal Division 23				6,200		10,700	16,900	2,535	19,435

Appendix D: Priority Rank for Implementation

On February 6, 2025, the technical advisory committee used the pairwise methodology to stack rank the rule sections based on which provided the greatest health and safety benefits. This approach systematically compares each section with every other section. Members voted on each pair and the total number of votes for each section were tallied to provide the stack ranking (See **Table 7: Stack-Ranked Sections Based on Health and Safety Benefits**).

Note: The committee excluded sections with no direct health or safety benefit, such as purpose, definition, and severability.

Table 6: Stack-Ranked Sections Based on Health and Safety Benefits

Section	# Votes
1. Injury Prevention	114
2. Routine Inspection	101
3. Imminent Health Hazard	98
4. Indoor Air Quality/Ventilation	97
5. Playgrounds	94
6. Specialized Rooms	92
7. Construction Plan Review	73
8. Temperature	70
9. General Building Requirements	65
10. Site Assessment	55
11. Showers and Restrooms	3