Brooks SB614.pdf Uploaded by: Eli Howard Position: FAV

February 21, 2023

Chairman Brooks and Committee SB-614

Chairman Brooks and Members of the Education, Energy and the Environment Committee, thank for the opportunity to provide written testimony regard SB-614

The Sheet Metal and Air Conditioning Contractors National Association (SMACNA) is an international trade association representing 3,500 signatory contracting firms with more than 100 chapters throughout the United States, Canada, Australia and Brasil. SMACNA provides its sheet metal and air conditioning contractor members with assistance in areas including business management, labor-relations, marketing, governmental affairs, and technical research and development – on both a national and local level. SMACNA's membership includes thousands of leading contractor corporations specializing in complex energy saving retrofit contracting, facilities energy management and residential, commercial, public, and industrial energy system construction at the local, state and federal government levels.

SMACNA as an American National Standards (ANSI) setting organization develops standards for the HVAC, Architectural, Industrial, Energy, Indoor Air Quality industry. As an ANSI organization our standards are vetted thru an open consensus based process to ensure the integrity of our standards, that are then adopted by the Model Building Code and Design/Construction Community.

Our recently released SMACNA Fire, Smoke & Radiation Damper Manual meets the intent of SB-614. As the SMACNA Fire, Smoke & Radiation Damper Manual requires compliance to NFPA 80 and NFPA 105, as well as UL 555, this ensures the requirement for the proper installation, service and lifetime inspection of all Fire/Smoke Dampers will be enforced thereby providing for a both resilient facility, but one that meets the modern requirements for Life Safety for all occupants.

On behalf of SMACNA we thank you for the opportunity to provide this written testimony in strong support of SB-614.

Eli P. Howard, III Executive Director Technical Services SMACNA <u>Ehoward@smacna.org</u> 703.803.2980

SB0614 - Written Testimony - Geoff Parks.pdf Uploaded by: Geoff Parks

Position: FAV



February 17, 2023

SB614 – Public Safety – Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems

Chairman Feldman and members of the Education, Energy, and the Environment Committee, thank you for giving me the opportunity to provide written testimony regarding SB614.

I am in support of this bill.

My name is Geoff Parks and I've been in the sheet metal HVAC industry for over 25 years.

As a Maryland HVAC contractor that employs certified Fire and Smoke Damper Technicians, we've performed damper acceptance and inspection testing on many buildings throughout the region. We can attest first hand to the pervasive issues with Fire Life Safety dampers as documented in the 2021 University of Maryland reliability study.

On too many occasions to count, dampers have been installed incorrectly, had no or limited access, broken fusible links, debris blocking damper blade function, broken damper shafts, inoperable actuators, and the list goes on. Resulting in the need to repair or replace the dampers completely.

Passing SB614 will make Maryland buildings safer for its occupants and help to prevent future tragedies and possible loss of life.

Sincerely, Geoff Parks SMACNA / SMART Local #100 gparks@cmcsheetmetal.com

BDCBT SB 0614 Public Safety - Fire Dampers, Smoke Uploaded by: Jeffry Guido

Position: FAV



Maryland Senate - Education, Energy and the Environment Committee

Chair: Brian J. Feldman Vice Chair: Cheryl C. Kagan

Senate Bill 0614 - Public Safety - Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems

Position: Support

Insulators

Electrical Workers

Boilermakers

United Association

Roofers

Cement Masons

Teamsters

Laborers

Bricklayers

Ironworkers

- Sheet Metal Workers
- Elevator Constructors

Painters

Operating Engineers

Carpenters

The Baltimore DC Metro Building Trades Council supports SB 0614. The proper installation, servicing and inspection of these devices is to ensure they function properly and protect the public from injurious harm or death. This is a public safety issue. We stand in solidarity with the Sheet Metal Air and Rail Transportation Union in support of the bill.

We ask the Committee for a favorable report. Thank you.

Sincerely,

Jeffry Guido

(E) consultingbyjlg@gmail.com (O) 301-743-5334 (C) 240-687-5195

5829 Allentown Rd Camp Spring MD 20746

Value on Display... Everyday.

SB 614 SMACNA_Favorable.pdf Uploaded by: Kurt Snyder Position: FAV



7833 Walker Drive, Suite 400 Greenbelt, MD 20770 301.446.0002 • Fax: 301.446.0018 www.smacnaatl.org

February 20, 2023

Dear Chair Feldman and members of the Education, Energy and the Environment Committee:

On behalf of the Sheet Metal Contractors National Association (SMACNA); Mid-Atlantic Chapter, I write today to express our strong support for Senate Bill 614, establishing requirements for the installation, inspection, and testing of fire dampers and associated smoke control systems for the welfare and public safety of Maryland buildings and structures. These systems and equipment represent Fire, Life & Safety (FLS).

SMACNA Mid-Atlantic represents 22 construction contracting firms, nearly 1,400 skilled professionals, and dozens of future professionals within the 5-year apprenticeship program. SMACNA Mid-Atlantic is an association of premier construction specialty contractors who utilize the latest technology and complete work to the highest standards as per SMACNA technical standards and manuals widely heralded across the United States and Canada.

The contractors of SMACNA Mid-Atlantic and our association most favorably support Senate Bill 614 as a critical need to fill a present void of structured and preventative maintenance of fire dampers and associated smoke control sub-systems. Presently, five states already have (FLS) legislation in place. Three other states are currently considering legislation to improve public safety through FLS procedures to comply with the National Fire Protection Association (NFPA). Senate Bill 614 would begin the process to bring Maryland in concert with multiple NFPA Standards.

Most importantly, Senate Bill 614 is an investment into public safety and welfare for all Marylanders.

Association member contracting companies and other organizations in Maryland have the certified and technically trained workforce to conduct detailed troubleshooting, inspection, repair, and follow-on preventative maintenance to FLS equipment and fire dampers.

Over the decades, some of the worst structural fires had billowing smoke overwhelm escape routes for occupants, displaced oxygen with toxic agents, and subsequently created chaos for first responders trying to navigate the buildings to begin rescue and establish evacuation routes.

According to a FEMA study in 2020, nearly 65% of counties, cities and towns across the United States lack modern building codes. When FLS systems and standards are not addressed, the 'smoke' has an ongoing opportunity to be both the labyrinth and the Minotaur. Our citizens deserve safe buildings with updated FLS legislation to support these measures.

Senate Bill 614 is critical for the safety of Marylanders and their families. For these reasons, SMACNA Mid-Atlantic overwhelmingly supports Senate Bill 614 and asks for a favorable report.

Very respectfully,

lurd. Su

Kurt R. Snyder Executive Director SMACNA Mid-Atlantic

Testimony SB-614 Fire Life Safety.pdf Uploaded by: Larry Kasecamp

Position: FAV

LARRY KASECAMP Legislative Director

TOM CAHILL Assistant Director

JOHNNY WALKER Secretary

REPRESENTATIVES

LAWRENCE KASECAMP

KENZELL CRAWFORD

CUMBERLAND Local 600

BRUNSWICK

EDMONSTON Local 1470

BALTIMORE Local 610

Local 1949 ERIC BILSON

JOHNNY WALKER

Local 631 TOM CAHILL





ANNAPOLIS OFFICE 176 Conduit St., Suite 206 Annapolis, MD 21401-2597

PH: 301-697-2695 utusldmd@gmail.com

March 21, 2023

The Honorable Chairman Brian Feldman and Members of the Education, Energy & Environment Committee

RE: SUPPORT SB-614

As Legislative Director in Maryland for the Transportation Division of the International Association of Sheet Metal, Air, Rail and Transportation Worker's (SMART) we urge your committee to **support SB614**, "Public Safety - Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems"

In my position I am responsible for looking out for the safety of the members I represent. In that respect I look at everything through this lens.

SB-614 is a public safety issue in that it requires the proper inspection of Fire Dampers, Smoke Fire Dampers, and Smoke control systems.

The failure of these devices to operate correctly when a building fire occurs just intensifies a very serious unsafe situation to the occupants trying to exit and the firefighters trying to enter to assess and address the condition.

When building fires occur there are most likely injuries or even deaths. In these situations, time is always of the essence. To have the problem exacerbated by these devices not working properly only increases this likelihood.

The solution is to have the properly trained personnel inspecting these systems and requiring the proper maintenance when faulty systems are discovered. Exactly what SB614 requires.

We urge a favorable report for SB-614!

Sincerely

Jany

Lawrence E. Kasecamp MD State Legislative Director Transportation Division



Dr James Milke Fire Damper Reliability Study.pdf Uploaded by: Thomas Killeen

Position: FAV

Background information for Proposed Legislation SB614/HB769

A research project, *Reliability of Fire Dampers, Smoke Dampers and Smoke Control Systems*, was completed in July 2021 by Dr. Jim Milke, Professor and Chair and Robert Ayoub, an undergraduate research assistant of the Department of Fire Protection Engineering at University of Maryland, College Park. Financial support for the project was provided by the National Energy Management Institute Committee. While reliability data exists for some fire protection equipment and systems, such as sprinkler, detection and firestopping systems, no data exists in the public domain for fire life safety (FLS) dampers or smoke control systems. This project was a first of its kind to examine the reliability of fire dampers, smoke dampers and smoke control systems through the collection of data from surveys of contractors who provide inspection services for those components. The analysis of data sought to distinguish components that are fully operational from those that are either not operational or whose operational status is compromised so that they are not at the required performance levels.

Recommended inspection frequencies for fire dampers, smoke dampers and smoke control systems are noted in the following model codes:

- NFPA 80: Fire dampers shall be inspected 1 year after installation, every 4 years thereafter, except hospitals, which have a 6-year inspection frequency.
- NFPA 92: Dedicated smoke control systems shall be inspected at least every six months and non-dedicated smoke control systems shall be inspected at least annually.
- NFPA 105: Smoke dampers shall be inspected 1 year after installation, every 4 years thereafter, except hospitals, which have a 6-year inspection frequency.

A total of 39 responses were received to the surveys that were distributed to contractors, engineering consultants and government agencies who conduct inspections of FLS dampers or smoke control systems.

The responses covered a total of 281 inspection projects in new buildings along with 1,120 inspection projects in existing buildings. The inspection projects in new buildings included inspections of 18,964 FLS dampers and 151,390 of those components in existing buildings.

A comparison of the condition of dampers in new versus existing buildings for questions 3-7 of the survey is provided in Table 1. For each of the responses, the dampers in existing buildings needing corrective actions are substantially greater than those in new buildings. For every question, a **majority** dampers in existing buildings were in need of service (repair or replacement of dampers, access issues, actuator replacement, reliability and the need to provide immediate attention in order to keep the building open). While the issues are much less prominent in new buildings, the number of issues identified are

still substantial. From a project perspective, the data also indicated that more than 90% of the dampers were reported to need immediate attention in 10 of 53 projects.

I 8			
Question	New Buildings	Existing Buildings	All Buildings
3a. FLS dampers needing repair	39	91	67
3b. FLS dampers needing replacement	5.6	77	53
3c. FLS dampers needing improved access	28	91	70
4. Actuators needing replacement	17	80	58
5. FLS damper projects with reliability concerns	29	79	38
6. Projects with >15% of components needing repair or replacement	17	71	53
7. FLS dampers needing immediate attention	5.6	63	43

Table 1. Responses Indicating Concerns with Dampers or Actuators (%)

The responses pertaining to inspections of smoke control systems varied by the type of system were less than the number obtained for FLS dampers. The number of reported problems observed with smoke control systems is substantial as indicated in Table 2.

	Table	5. Response	S OII SHIOKC	Control Bys	otems		
	Type System						
	Stairwell Pressurization		Zoned Smoke Control		Atrium Smoke Mgmt		
	New	Existing	New	Existing	New	Existing	
9. How many	inspection pr	ojects has you	ir company co	mpleted in th	e past 36 mo	nths?	
	118	149	84	297	27	65	
10. Proportion	n of projects r	equired repair	rs, adjusting, a	and/or balanci	ing of the syst	em,	
including asso	ciated dampe	rs?					
	85	41	86	12	81	22	
11. Proportion	n of projects r	equired that n	nore than 15%	6 of the comp	onents neede	d	
adjustments,	repairs or rep	acements?					
	69	19	79	7.4	74	11	

Table 3. Responses on Smoke Control Systems

In summary, the results of the survey indicate that inspections of FLS dampers and smoke control systems are identifying a substantial number of issues concerning these components or systems. The issues for FLS dampers in existing buildings were pervasive. Even so, FLS dampers in new buildings were not immune from needing attention. The issues for smoke control systems were more prominent in new buildings than existing buildings indicating the need for thorough commissioning tests.

J. Milke Professor and Chair Department of Fire Protection Engineering University of Maryland, College Park

FLS SB614 written evidence.pdf Uploaded by: Thomas Killeen

Position: FAV



International Association of Sheet Metal, Air, Rail & Transportation Workers, Local Union 100— Sheet Metal Division Affiliated with AFL-CIO

Richard D. LaBille, III Business Manager/President Russell K. Robinson Financial Secretary-Treasurer

Senator Feldman and Senate Committee Members,

Education, Energy, and the Environment Committee

The Miller Senate Office Building

11 Bladen Street Annapolis, MD. 21401

February 16, 2023

SB-614 Public Safety- Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers and Smoke Control Systems

I ask for a favorable vote on SB-614

Thank you for allowing me to provide written testimony on SB-614. My name is Tom Killeen, I'm a Business Representative and the Legislative Director for SMART local 100. I represent 2,000 working Sheet Metal Journeypersons that live in Maryland. In addition, I'm a Certified Professional with National Environmental Balancing Bureau, I'm a certification technician and a certified IAQ supervisor with Testing Adjusting Balancing Bureau.

For 25-years of my 42-year career of being a Sheet Metal Journeyperson, I've performed Testing, Balancing and Commissioning of HVAC Air and Water mechanical systems. During my career I've witnessed several hundreds of Fire Dampers, Smoke Fire Dampers and Smoke control systems that don't operate correctly. I've found fire dampers installed sideways and upside down, I've found fire dampers with no access door. I've found fire dampers that have had drywall track screwed to the outside of the damper and the screw located in the dampers track preventing the damper from closing. I've found fire dampers with 2x4's, coke cans and beer bottles (you name it) wedged in the damper where the linkage has broken under stress for many years. I've found smoke fire dampers that don't open and close properly because of mechanical fatigue or the damper had a broken internal shaft, or the electrical power has been severed or turn off at the break panel. In addition, this has been the experience of many of my colleagues in the testing Balancing and Commissioning field. There is data to back this claim up. A Fire Damper reliability study was done in 2021 by Dr. James Milke Ph.D., P.E. Professor and Chair of the Department of Fire Protection Engineering School at the University of Maryland. Study is being submitted for your review. The study concluded that 67.7% of all buildings had issues (repair, replacement or need of access) with the FLS dampers. Because there's suck a prevalent problem with fire dampers and smoke fire dampers not working as designed there is a real need for the individual that not only install but that will test fire dampers, smoke fire dampers and smoke-controlled systems to maintain a certification under ANSI (American National Standards Institute) in doing this work. We feel the best way to correct the prevalent problem is to ensure that the individuals doing the inspections be certified in the work they are performing, and all fire dampers, smoke fire dampers and smoke-controlled systems be checked every four years.

Currently, sprinkler systems, Fire alarm systems, and fire extinguishers are tested periodically to guarantee that they work properly. Unfortunately, other components such as fire dampers, smoke dampers and smoke control systems are not clearly subject to inspection and testing requirements.

By passing HB-769 it would ensure that in an event of a fire all occupants and fire fighters that were in or entering the building at the time of a fire would be in less harm and less likely to perish in a building fire. Secondary and tertiary results of having ANSI certified technicians test the said dampers every four years may result in lower insurance costs and lower electrical costs. When an HVAC system operates with faulty dampers that are closed, partially closed or partial blocked the HVAC system fan uses more energy to of come the unnecessary resistance in the duct system.

Once again, I ask you for a favorable vote on SB-614.

Respectfully,

Thomas Killeen Legislative Director/ Bus. Representative SMART Local 100 4725 Silver Hill Road Suitland, MD. 20746

Cell 443.784.9718

SB0614 WE Bower.pdf Uploaded by: Thomas Killeen Position: FAV



W.E. Bowers, Inc. Mechanical Construction, Plumbing and HVAC Service

12401 Kiln Court • Suite A Beltsville, MD 20705 301 • 419 • 2488 Construction Fax: 301 • 419 • 2711 Service Fax: 301 • 419 • 2310

Senator Feldman and Senate Committee Members Education, Energy and the Environment Committee The Miller Senate Office Building 11 Bladen Street Annapolis, MD 21401

SB-614 Public Safety – Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers and Smoke Control Systems

My name is Timothy Aley a Vice President at W.E. Bowers, Inc. and member of SMART local 100.

During my 30+ years in the sheet metal industry I have seen the incorrect installation of Fire, Fire/Smoke and Smoke dampers. An incorrect installation is not limited to the installing contractor/technician installing the device correctly but making sure a follow on trade did not install a portion of their work to hamper the operation of these devices. Some examples I have seen are dampers installed upside down, screws installed through damper sleeves rendering the damper nonoperational, dampers installed outside of the fire barrier they are designed to protect. I have also seen dampers propped open by an end user because the diffusible link has broken, and incorrect diffusible links installed.

These devices are only effective in creating a safe building when installed correctly, a correct install can only be confirmed with an adequate inspection. Inspection needs to be performed on a regular basis because some of these devices see operation daily and as we all know moving parts tend to break.

I ask that you please support SB-614 with a favorable vote.

Respectfully

Timothy Aley Vice President W.E. Bowers Inc 12401 Kiln Court Suite A Beltsville, MD 20705

SB614- 2023.pdf Uploaded by: Thomas Skinner Position: FAV

February 21, 2023

Brian J. Feldman, Chair, Education, Energy, and the Environment Committee

2 West, Miller Senate Office Building, Annapolis, Maryland 21401

Dear Chairman Feldman & Members of the Committee

The Professional Fire Fighters of Maryland support Senate Bill 614 (SB614)

Thank you for allowing me to provide testimony in support of SB614. I am Tom Skinner, and I am the First Vice President of the Professional Fire Fighters of Maryland (PFFMD) and an active Fire Lieutenant with the Baltimore City Fire Department, serving for over 31 years. The PFFMD represents over 10,000 active Fire Fighters and Paramedics across the great state of Maryland. I would also, like to thank Senator Brooks for sponsoring this vital piece of Public Safety legislation.

The goal of SB614 is to ensure the fire safety systems in commercial, industrial, and public buildings in Maryland are safe. SB614 requires the periodic inspection and testing of fire dampers, smoke dampers, and smoke control systems by trained professionals. These dampers and smoke control systems regulate the flow and movement of fire and smoke through heating, ventilation, and air conditioning (HVAC) systems. The successful operation of these systems can be the difference between life and death and the difference between a minor fire and a major conflagration.

SB614 will make buildings safer in Maryland. Currently, sprinkler systems, fire alarms, and fire extinguishers are periodically inspected to ensure they are working. However, through an accidental oversite, components like fire dampers, smoke dampers, and smoke control systems are not clearly subject to inspection and testing requirements.

HB 769 would bring Maryland in line with the approved standards of the National Fire Protection Association. NFPA Standards 80, 92, and 105 each speak to these systems and the necessary inspections and their inspection requirements. This Bill will bring Maryland to the minimum standards.

The research provided in the paper titled "Reliability of Fire Dampers, Smoke Dampers and Smoke Control Systems" by James Milke and Robert Ayoub of the Department of Fire Protection Engineering, the University of Maryland, May 3, 2021, provides comprehensive data to support our concerns.

This Bill will protect the lives of Marylanders and Fire Fighters! The PFFMD asks for a favorable report on **Senate Bill 614.**

Sincerely,

Tom Skinner Professional Fire Fighters of Maryland

SB 614 Smoke Dampers.pdf Uploaded by: Tom Clark Position: FAV

International Brotherhood of Electrical Workers



JOSEPH F. DABBS: Business Manager • THOMAS C. MYERS: President • RICHARD D. WILKINSON: Vice President CHRISTOPHER M. CASH: Financial Secretary • RICHARD G. MURPHY: Recording Secretary • PAULO C. HENRIQUES: Treasurer



TESTIMONY IN SUPPORT OF SB 614 PUBLIC SAFETY-FIRE DAMPERS, SMOKE DAMPERS, COMBO DAMPERS & SMOKE CONTROL SYSTEMS February 21, 2023

TO: Sen. Brian Feldman, Chair and members of the Education, Energy & Environment Committee FROM: Tom Clark, Political Director, International Brotherhood of Electrical Workers Local 26

Mr. Chair, Madam Vice Chair and members of the Committee, I respectfully ask for your **support of SB 614.** This Public Safety bill is something we can all agree on. The inspection and professional testing of fire dampers, smoke dampers and smoke control dampers will keep our public buildings as safe as possible.

This work is handled by Duct and Sheet Metal workers. As a fellow tradesman and electrician, I know that there is a sense of pride that we take when installing and testing "life safety" systems. Knowing that our work can save lives, is tremendously rewarding to craftspeople. Although, this is not electric work, these dampers are the first line of defense in fire protection. When a properly installed and tested damper denotes smoke or flames, it sends a signal to electrical systems such as fire alarm and fire pumps. It's this combination of detecting, warning and fighting the flames that saves lives.

I ask that you support the idea of maximum testing of these "life safety" measures and join with the industry, the National Fire Protection Association and Local Fire Marshalls in **support of SB 614.** Thank you



Washington, D.C.

.....

Brooks_SB614.pdf Uploaded by: Benjamin Brooks Position: FWA

BENJAMIN BROOKS Legislative District 10 Baltimore County

Education, Energy, and the Environment Committee



THE SENATE OF MARYLAND Annapolis, Maryland 21401 Annapolis Office James Senate Office Building 11 Bladen Street, Room 303 Annapolis, Maryland 21401 410-841-3606 · 301-858-3606 800-492-7122 Ext. 3606 Benjamin.Brooks@senate.state.md.us

District Office Windsor Mill Office 8419 Liberty Road, Suite B Windsor Mill, Maryland 21244 410-496-4037

TESTIMONY IN SUPPORT WITH AMENDMENT OF SB614 Public Safety – Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems

Education, Energy and the Environment Committee February 21, 2023

Chair Feldman, Vice-Chair Kagan, and Members of the Committee,

Thank you for the opportunity to testify before you on SB614, Public Safety - Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems. The purpose of this bill is to establish requirements for the installation, inspection, and testing of fire dampers, smoke dampers, combination fire smoke dampers, and smoke control systems.

Sprinklers and fire extinguishers are not the only way to prevent the spread of a fire in a building. Smoke and fire dampers play an invaluable role in preventing the spread of fire and toxic fumes through HVAC ducts. However, there are very few rules regarding the installation and inspection of these systems. According to the University of Maryland's Department of Fire Protection Engineering reliability study published in 2021, out of the 150,000 fire and smoke dampers inspected, 80,000 or 53% required some type of repair. This study reaffirms the importance of periodic inspections.

SB614 provides clear guidance to commercial building owners and HVAC professionals on the proper maintenance to keep these dampers and control systems in working and safe condition. This bill conforms Maryland to the evidence and the approved standards of the National Fire Protection Association. A number of municipalities such as Pittsburgh and Philadelphia have already implemented these standards. Further, both Delaware and Illinois approved similar regulations unanimously.

While I acknowledge the impact this will have on commercial building owners, these inspections and installation requirements are a matter of public safety. Failed smoke control systems have made several deadly fires worse than they otherwise should have been. In the 1980's many of us witnessed the MGM Grand Hotel in Las Vegas take the lives of 85 guests and injure 600 others. These deaths were caused in large part due to smoke inhalation. On June 14, 2017, the fire of the Grenfell Tower in North Kensington, West London, took the lives of 72 occupants. Investigative reports revealed an insufficient damper system contributed to that fire.

Investing in this change now will keep our commercial buildings safer and help protect the lives of Marylanders.

For these reasons I am requesting a favorable report on SB614.

With kindest regards,

Benjamin J. Brooke

Benjamin Brooks

SB614_OnePager.pdf Uploaded by: Benjamin Brooks Position: FWA

SB 614

PUBLIC SAFETY

FIRE DAMPERS, SMOKE DAMPERS, AND SMOKE CONTROL SYSTEMS

Purpose

The purpose of this bill is to establish requirements for the installation, inspection, and testing of fire dampers, smoke dampers, combination fire smoke dampers, and smoke control systems.

An inspection required one year after first installation

53

Over 80,000 of 150,000 installed dampers were in need of repair

years



From then on, inspections required every four years (six years for hospitals)

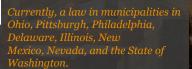
Smoke/fire dampers



Smoke dampers, fire dampers, and smoke systems help prevent the spread of toxic fumes and fire through HVAC ducts. In commercial buildings, these devices are crucial to reducing the deadliness of fires and may actually help protect commercial buildings during fires.

> Passed Unanimously DELAWARE





Why Maryland needs this

These results were found by a study published in 2021, by the University of Maryland's Department of Fire Protection Engineering. This is an unacceptable number, especially if lives are at stake.

This bill conforms Maryland to the evidence and the approved standards of the National Fire Protection Association. While I acknowledge the burden that this will have on commercial building owners, these inspections and installation requirements are a matter of public safety. Failed smoke control systems have made a number of deadly fires such as the 1980 MGM Grand fire and the 2017 Grenfell Tower fire worse than they should have been. **The facts are clear:** Investing in this change now will protect commercial buildings and lives later down the road.

Doing it Right This bill would require the inspections to be done by licensed HVACR

professionals. This will ensure that qualified individuals are inspecting these crucial systems.

SB 614.Fire Damper Inspections.pdf Uploaded by: John Woolums

Position: UNF



BILL:	Senate Bill 614
TITLE:	Public Safety - Fire Dampers, Smoke Dampers, Combination Fire Smoke
	Dampers, and Smoke Control Systems
DATE:	February 21, 2023
POSITION:	OPPOSÉ
COMMITTEE:	Education, Energy, and the Environment
CONTACT:	John R. Woolums, Esq.

The Maryland Association of Boards of Education (MABE) opposes Senate Bill 614 as introduced in light of the significant unanticipated and unfunded mandate regarding new inspections of all smoke dampers and related smoke control systems in all public school buildings.

First, MABE supports high standards for school facility design, construction and maintenance, including fire safety standards. MABE also acknowledges the bill's intention to require comprehensive inspections to ensure the functionality of smoke control systems in the very rare event of a fire. Fortunately, such events are extraordinarily rare in Maryland's 1,400 public school buildings. In terms of safety standards, the Department of General Services (DGS) reviews design development and construction documents for each State funded project to ensure that the facility meets industry design standards and certain state safety standards including fire safety standards. In addition, schools are required to conduct fire safety drills; drills which are dependent on whether sprinkler systems are present.

In 2017, legislation was enacted to align the required number of fire drills with the State Fire prevention Code, which is established under § 6-206 of the Public Safety Article. The State Fire Prevention Code requires school facilities with automatic sprinkler systems to hold five fire drills per year, with at least two occurring in the first four months of the school year. Schools that are not fully protected by automatic sprinkler systems must hold eight fire drills annually, with at least three scheduled in the first four months of the school year.

In this context, MABE supports local discretion to adopt programs and policies to maintain and improve school safety and security. For example, annual Capital Improvement Programs for Public School Construction often include requests for state and local funding approval for sprinkler systems and fire alarm upgrades. In other instances, for property leased or owned by a school system or by a charter school, for use as a public school building, the local school system or charter school must obtain all approvals required by the fire marshal and other State and local agencies prior to submission of the request for approval to the State Superintendent. MABE believes this process, combined with the assurance that all newly constructed and major renovated schools have sprinkler systems installed, ensures that all schools are operated according to high fire safety standards.

In addition, newly constructed and substantially remodeled schools must have carbon monoxide detectors installed in areas of new and existing educational occupancies where fuel fired equipment is present. The law specifies that the detectors must be installed in accordance with National Fire Protection Association's Standards, and that a signal from the carbon monoxide detector must be transmitted automatically to an approved supervising station or constantly attended on-site location.

Again, each local board of education supports federal, State, and local government funding for local public school safety programs and facility upgrades which are essential to maintaining safe and secure schools and access to a quality education for all of Maryland's students. Although MABE appreciates the intent of this bill to enhance fire safety in schools, MABE objects to Senate Bill 614 in light of the significant costs and level of fire safety in school facilities already ensured under current standards.

For these reasons, MABE requests an unfavorable report on Senate Bill 614.

'23 SB 614 DGS LOI EEE 2-21-23.pdf Uploaded by: Ellen Robertson Position: INFO



Wes Moore, Governor · Aruna Miller, Lt. Governor · Atif Chaudhry, Acting Secretary

BILL:	Senate Bill 614 Public Safety – Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems
COMMITTEE:	Education, Energy, and the Environment
DATE:	February 21, 2023
POSITION:	Letter of Information

Upon review of Senate Bill 614 Public Safety – Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems, the Maryland Department of General Services (DGS), provides these comments for your consideration.

DGS owns fifty-two (52) facilities and supports State-owned facilities of various Agencies (1,354 facilities) for a total of approximately twenty-six (26) million gross square feet and a total of 1,406 facilities. DGS assumes that work required under this bill to address bringing State-owned buildings into compliance would come through DGS as the agencies DGS supports do not have delegated authority to address this need.

This bill would require each fire damper, smoker damper, combination fire smoke damper, or smoke control system to be installed in accordance with accepted engineering practices that meet National Fire Protection Association standards and be approved by the state fire marshal. Fire dampers are passive fire protection products used in heating, ventilation, and air conditioning ducts to prevent the spread of fire inside the ductwork through fire-resistance-rated walls and floors. The owner of a building with fire dampers is required to have them inspected by October 1, 2024, if installed before then. If the fire dampers are installed on or after October 1, 2023, they must be inspected within 12 months. Following the initial inspection a recurring inspection must occur at least every 6 years for a hospital, and every 4 years for all other types of building. If the equipment fails to pass inspection it must be replaced or remedied to comply with the bill's requirements.

Initially, DGS would be required to inspect every DGS-owned or operated building. This inspection would equal **26 million square feet** to identify the location of fire dampers in each facility. This **initial inspection**, **remediation and/or repairs as identified could cost over \$100 million**. Ongoing annual costs to conduct inspections and repairs every four (4) years for buildings and every six (6) years for hospitals are estimated at approximately \$20 million annually.

For additional information, contact Ellen Robertson at 410-260-2908.

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February 15, 2023

SB614 - Public Safety - Fire Dampers, Smoke Dampers, Combination Fire Smoke Dampers, and Smoke Control Systems

Chairman Feldman and members of the Education, Energy, and the Environment Committee, thank you for the opportunity to provide written testimony regarding SB614.

The National Energy Management Institute (NEMI) works with public, private, and government organizations as well as companies nationwide to make environments safer for people in schools, hospitals, and commercial buildings nationwide.

NEMI also creates training and certification opportunities, so consumers know the workers — who assure fire safe safety systems are inspected, verify the indoor air quality in schools, and make sure the heating and air conditioning systems in office buildings are energy efficient — are at the top of their industry and experts in their field. NEMI works with state and federal officials, as subject matter experts (SME), to make sure legislation and safety align, allowing members of the International Association of Sheet Metal, Air, Rail and Transportation (SMART) workers and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) to use their training and experience to ensure the safety of building occupants and first responders.

Intent

The overarching goal of SB614 is to ensure the fire safety systems in commercial, industrial, and public buildings in Maryland are safe for the occupants and first responders if there were a fire or smoke event.

Problem

Currently, sprinkler systems, fire alarms, and fire extinguishers are periodically inspected to ensure they are working. However, other components like fire dampers, smoke dampers, and smoke control systems are not clearly subject to inspection and testing requirements.

As an experienced field technician, I can tell you that a significant amount of Fire Life Safety dampers and Smoke Control Systems do not operate as designed. During an event, building occupants depend on these systems and components to function as designed so they can safely exit the building. First responders depend on these same systems and components to safely enter a building during an event.





Unfortunately, the problems with Fire Life Safety dampers and Smoke Control Systems I identified as a field technician have proven to be systematic across the country. In 2021, the University of Maryland Study reviewed over 170,000 fire life safety dampers and found that 53% of dampers in existing buildings needed repairs. The same study reviewed 740 Smoke Control System Projects and found that 41% of Existing Buildings Stairwells required repairs or adjustment.

If any building had less than half of their sprinklers, fire alarms, or fire extinguishers in working order, that building would be evacuated and considered unfit for occupancy until repairs were made. Why would we treat fire and smoke dampers and smoke control systems any differently? Often the reason these items are overlooked is because they are installed above the ceilings or in mechanical spaces outside of view of most of the public, unlike fire sprinkler systems and fire extinguishers.

Solution

SB614 would bring Maryland in line with the approved standards of the National Fire Protection Association which are already part of the Maryland Fire Prevention Code. SB614 ensures that technicians performing the work are qualified by an internationally recognized certification, accredited under ISO/IEC 17024. This accreditation gives assurance to the state and municipal inspectors that the life safety testing and inspections have been done in accordance with the applicable codes, adopted standards, and manufacturer's instructions.

Legislation

The proposed solution that is outlined in this bill is not unique, in fact many other states and municipalities have adopted similar legislation or ordinances; New Mexico passed SB143, Washington State passed HB2701, Nevada passed AB297, Illinois passed HB2408, and Delaware passed SB208. In addition, Fire Safety Legislation has passed in Pittsburgh, Philadelphia and a dozen counties and municipalities in Ohio. This year similar bills are being introduced in Alaska, Pennsylvania, New Jersey, and Oregon.

Thank you for your time and your attention to this matter of immense importance to the public's safety. I would be happy to provide further information to the committee if desired, my contact information is below.

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