

## TRAINING AND COLLABORATION ARE THE ANSWER

- Fire dampers are essential fire safety mechanisms that should be maintained by trained professionals.
- Fire Chiefs and fire professionals need more eyes on the problem and to be assured that technicians are trained
- Nationally certified training is available and should be required for buildings of public accommodation
- Proper training reduces chances of property damage and loss



#0728

ISO/IEC 17024

Personnel Certification Program

## ANSI ACCREDITATION

- Accreditation Program for Personnel Certification Bodies under ANSI/ISO/IEC 17024
- The ANSI mark signals to an Authority Having Jurisdiction (AHJ) that the credential holder has undergone a valid, fair, and reliable assessment to verify that s/he has the necessary competencies to practice.
- Many government agencies such as the U.S. Department of Defense, Department of Energy, Federal and State OSHA, and the FDA, rely on ANSI accreditation as it assures the competency of the certification program.

## PASSED FLS ORDINANCES

### Passed Fire Life Safety Ordinances

- Lansing, Michigan
- Pittsburgh, Pennsylvania
- Evansville, Indiana
- Columbus, Dayton and Chillicothe cities in Ohio
- Franklin and Hamilton counties, Ohio
- 3 Cuyahoga county school districts

### Statewide Fire Life safety provisions

New Mexico  
Nevada  
Hawaii  
Washington  
Illinois

## HOW RELIABLE ARE HVAC FIRE DAMPERS, SMOKE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS AND SMOKE CONTROL SYSTEMS?

Dr. James Milke, professor and chair of the Department of Fire Protection Engineering at the A. James Clark School of Engineering at the University of Maryland, recently completed a study to determine the reliability of HVAC fire dampers, smoke dampers, combination fire/smoke dampers and smoke control systems.

The study included a total of 1,401 buildings (existing and newly constructed) that contained 170,354 fire dampers, smoke dampers, and/or combination fire/smoke dampers. Of these installed dampers, 81,038 were in need of some type of repair.

In Dr. Milke's summary, he states, "The issues for fire life safety (FLS) dampers in existing buildings were pervasive, with a majority of the responses to each question expressing concern. Even so, FLS dampers in new buildings were not immune from showing evidence of problems."

**TO ACCESS THE ENTIRE UNIVERSITY OF  
MARYLAND RELIABILITY STUDY VISIT  
[NEMICONLINE.ORG/UMD-RESEARCH-STUDY](http://NEMICONLINE.ORG/UMD-RESEARCH-STUDY)**

Heroes saves lives.  
Dampers save heroes.



# HOUSE BILL 218 SENATE BILL 169

## FIRE LIFE SAFETY SYSTEMS AND THE IMPORTANCE OF DAMPERS

### OBJECTIVE:

- Increase quality of damper repair and maintenance in Alaska to ensure the safety of building occupants and first responders
- Protect property

## IMPROPER TRAINING AND STANDARDS LEAD TO DANGEROUS FIXES

### CUP FIX



### ROCK FIX



## WHEN IT DOESN'T WORK:

- MGM Grand fire
- Las Vegas, NV
- November 21, 1980
- Fire on Casino Level
- 85 Dead, majority by smoke inhalation in upper floors
- Over 700 injured, including 14 firefighters



Fire dampers not being properly maintained are cited as a cause of the spread of smoke and fire. [nfpa.org/-/media/Files/News-and-Research/Resources/Fire-Investigations/FIMGMGRAND](https://www.nfpa.org/-/media/Files/News-and-Research/Resources/Fire-Investigations/FIMGMGRAND) See pages 50-55 on investigation report.



*"Grenfell Tower's smoke ventilation system failed days before fire"*

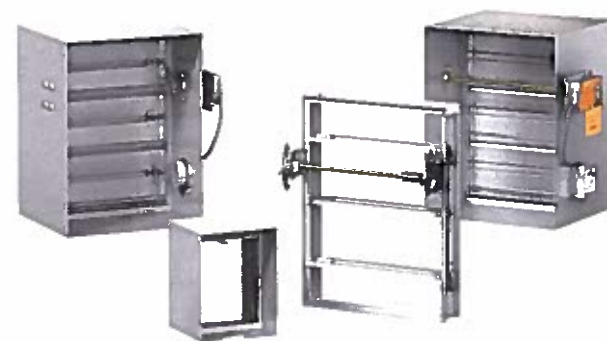
The smoke ventilation system at Grenfell Tower was reported to have failed eight days before the fatal blaze claimed 71 lives, but a proposal to fix it for £1,800 (\$2,329) was ignored, the public inquiry has heard.

An earlier proposal for a 12-month maintenance contract involving six-month maintenance visits for the system, costing £3,600 (\$4,659), was ignored.

—The Guardian, 180605

## HVAC FIRE LIFE SAFETY

- What is it?
- The sum of components within the HVAC system that slow or stop the movement of fire and/or smoke
- Components:
  - Duct dampers
  - Fan controls in conjunction with the fire alarm system
  - Dedicated/non-dedicated smoke control systems
- Proper installation, compliance with codes, inspection, and maintenance are linked to the successful operation of components in the event of fire incident



## WHY IS IT IMPORTANT?

- HVAC system generally penetrates every occupiable space of every floor, potentially conveying fire, lethal smoke, and toxic gases to areas remote from the origin of the fire
- The successful operation of HVAC system components can mean the difference between a nuisance fire and catastrophe
- Codes require that buildings are designed with assurance that occupants will be reasonably safe from fire and smoke