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HSW: Yes

## School Security

### A Look at Classroom Door Locking Solutions

Frank “Rocky” Rivas, AHC, FDAI, CSI, CDT, CAT,  
ASSOC. AIA.

Credit(s) earned on completion of this course will be reported to **AIA CES** for AIA members.

Certificates of Completion for both AIA members and non-AIA members will be available on-line approximately 4-6 weeks after the program.

This course is registered with **AIA CES** for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



# Course Description

- There is an ever growing public concern for the safety of our schools.
- As a result, there are many products coming into the marketplace that do not meet the already established code requirements.
- In this presentation, we will take a look at what is available for security purposes that is code compliant and the concerns regarding those solutions that are not.

## Learning Objectives

- Recognize resources available for School Security recommendations
- Identify currently available security solutions
- Look at barricading devices on the market
- Consider codes that affect hardware selection and industry recommendations

MAY 2, 1998, 32-33

# TIME

## THE MONSTER NEXT DOOR...

### WHAT MADE THEM DO IT?

People

TRAGEDY IN VIRGINIA

# LOVED ONES LOST

• SURVIVORS DESCRIBE THE CHAOS • FRIENDS REMEMBER THE VICTIMS • THE KILLER'S BIZARRE LIFE

CHICAGO SUN-TIMES

(M) CITY & SUBURBAN • (T) ELDERLINE • (W) SPORTS • (F) ARTS • (S) BUSINESS • (S) PREVIEW • (S) FEBRUARY 11, 2000 • 60¢ Page 46

# Why?

SUSPECTED GUNMAN WAS ONCE A TOP STUDENT • TEACHER: 'I KEPT RUNNING AND HE KEPT FIRING' [COVERAGE, PAGES 2-6]

# New York Times

NEW YORK, SUNDAY, DECEMBER 16, 2012

\$5.00

## PUPILS WERE ALL SHOT MULTIPLE TIMES WITH A SEMIAUTOMATIC, OFFICIALS SAY

### VICTIMS OF THE NEWTOWN SHOOTINGS

Charlotte Bacon, 6	James Mattioli, 6
Daniel Barden, 7	Grace McDonnell, 7
Olivia Engel, 6	Emilie Parker, 6
Josephine Gay, 7	Jack Pinto, 6
Ana Marquez-Greene, 6	Noah Pozner, 6
Dylan Hockley, 6	Caroline Previdi, 6
Madeleine Hsu, 6	Jessica Rekos, 6
Catherine Hubbard, 6	Avielle Richman, 6
Chase Kowalski, 7	Benjamin Wheeler, 6
Jesse Lewis, 6	Allison Wyatt, 6

Rachel Davino, 29 TEACHER	Lauren Rousseau, 30 TEACHER
Dawn Hochsprung, 47 SCHOOL PRINCIPAL	Mary Sherlach, 56 SCHOOL PSYCHOLOGIST
Nancy Lanza, 52 MOTHER OF GUNMAN	Victoria Soto, 27 TEACHER
Anne Marie Murphy, 52 TEACHER	

### 'ACTS OF HEROISM'

The Gunman Shot His Way Into a School In Connecticut

By JAMES BARRON

The gunman in the Connecticut shooting blasted his way into the elementary school and then sprayed the children with bullets, first from a distance and then at close range, hitting some of them as many as 11 times, so he fired a semiautomatic rifle loaded with ammunition designed for maximum damage, officials said Saturday.

The state's chief medical examiner, H. Wayne Carver Jr., said all of the 20 children and 6 adults panned down at Sandy Hook Elementary School in Newtown, Conn., had been struck more than once in the head.

He said their wounds were "all over, all over."

"This is a very devastating set of injuries," he said at a briefing in Newtown. When he was asked if they had suffered after they were hit, he said, "Not for very long."

The disclosures came as the police released the victims' names. They ranged in age from 4 to 56.

The children — 12 girls and 8 boys — were all first-graders. One little girl lost just turned 7 on Tuesday. All of the adults were women.

The White House announced that President Obama would visit Newtown on Sunday evening to meet with victims' families and speak at an interfaith vigil. On Saturday, as families began to claim the bodies of lost loved ones, some sought privacy. Others, made out, Robbin Barker.

as Internet-backed draft consultation, hoping that the results would end three weeks of violence, division and distrust between the billions and their opponents over the ground rules of Egypt's presidential democracy.

The Muslim Brotherhood, the main Islamist group aligned with President Mohamed Morsi, predicted a big win for reformers. In the districts that voted Saturday, including the opposition stronghold of Cairo and Alexandria, about 57 percent approved the new constitution, according to an unofficial count by the Brotherhood on Sunday morning.

Half of the country will vote next Saturday, but in predominantly rural areas that are expected to heavily favor the charter. The Brotherhood's count, while not official, was based on tallies posted at each voting station.

A spokesman for the main coalition opposing the charter said that it had found widespread irregularities and that its leaders would speak later on Sunday in Cairo, the biggest city, about 52 percent voted no, according to the preliminary results.

Regardless of the results, the unexpectedly heavy turnout and the referendum's outcome.

The debate for Dr. Gilman's longtime friends and colleagues

Continued on Page 30



There is No Calling More  
Vital than the Safety and  
Livelihood of our Children!



# Security Considerations

- Key areas of focus:
  - Building perimeter & grounds
  - Entrances & building exterior
  - Building interior & classrooms







# Building Perimeter & Grounds



PRODUCTS	BENEFITS
Institutional Grade Door Hardware , Locks, & Padlocks	Durable & secure for remote building, gates, etc.
Fencing & Automatic Gates	Limit access to grounds, play areas, sports fields, bus unloading areas, etc.
Video Cameras	Monitor parking lots, driveways, sports fields, etc.
Intercom with Video Monitoring	Visual before opening remote gates and/or doors
Emergency Call Boxes	Notify of emergencies in remote areas like parking lots & sports fields
RTLS/GPS Asset Tracking	Track the location of tractors , golf carts, and other equipment
Video Analytics & Electronic Perimeter Detection	Detect activity in areas where there should not be any
Door & Window Contacts	Annunciation for forced entry and/or doors left open at remote buildings
Verified Intrusion with Audio	Intrusion monitoring for remote building

## BEST PRACTICES

Fence in multi-building campuses and temporary classrooms as well as playgrounds.

# Entrance & Building Exterior

PRODUCTS	BENEFITS
Institutional Grade Door Hardware, Locks, etc.	More durable & secure.
Electrified Locks	Remote door control and card access
Door Contacts & Sounders / Window Contacts	Remote & local annunciation for forced entry and/or doors left open
Automatic Swing Doors	ADA Compliance, remote door control, and card access
Automatic Sliding Doors	ADA Compliance, high throughput, remote door control, and card access
Intercom with Video Monitoring	Visual of all visitors before remote unlocking outside door
Video Cameras	Monitor entrances when doors unlocked & students going to class
Visitor Management Software	Check-in all visitors to verify ID and cross check against various blacklists
Metal Detectors	Prevent guns & knives from getting in the building
Ballistic & Blast Resistant Glass	Provide higher level of protection for doors & windows
Panic Buttons	Provide office staff a way to alert when trouble present
Optical Turnstiles w/ Prox or Biometric Readers @ Bus	Track student attendance and 'who is in the building'

## BEST PRACTICES

All exterior doors locked during school hours with single point of entry/exit.

Require access through two controlled doors before gaining access to the main hallway (secure vestibule).

Document notification process for forced door and perimeter breaches. Practice the process.

Document process for positive identification and visitor management at school entrances and remote locations.



# Building Interior & Classrooms

PRODUCTS	BENEFITS
Institutional Grade Door Hardware, Locks, etc.	More durable & secure.
Electrified/Wireless Locks	Remote door control, lock down, and card access
Video Cameras	Monitor hallways, cafeteria, and other large assembly and/or problem areas
Automatic Swing Doors	ADA Compliance, remote door control, and card access
Automatic Sliding Doors	ADA Compliance, high throughput, remote door control, and card access
Intruder Locks	Allow classrooms to be locked from the inside
Panic Buttons / Key Pads / Card Readers	Provide teachers & admin a way to alert when trouble present
RTLS (Real-Time Location System) People & Asset Tracking	Mustering, automated attendance , high dollar asset tracking, panic( with location)
Verified Intrusion with Audio	Intrusion monitoring & Listen-in capabilities during an incident or alarm
Mass Notification / Paging	Allow for communication inside & outside via various means (PA, text, etc)
Access Control w/ Biometrics	Restrict access to higher security areas & POS integration
Patented Keying System	Higher security & flexibility
Situational Awareness Software	Consolidates various security systems into a single platform for increased situational awareness. faster responses. and better control
BEST PRACTICES	
All classroom doors locked during school hours with single point of entry/exit.	
Document lock down and other emergency preparedness processes. Practice the processes.	





# The safest place to be is behind a locked classroom door.

## Final report of the Sandy Hook Advisory Commission:

*The testimony and other evidence presented to the Commission reveals that there has never been an event in which an active shooter breached a locked classroom door.*



[http://www.ct.gov/csao/lib/csao/Sandy\\_Hook\\_Final\\_Report.pdf](http://www.ct.gov/csao/lib/csao/Sandy_Hook_Final_Report.pdf)

# Resources Available

NASFM (The National Association of State Fire Marshalls)

[www.firemarshals.org](http://www.firemarshals.org)

ALICE (Alert, Lockdown, Inform, Counter, Evacuate) Training Institute

[www.alicetraining.com](http://www.alicetraining.com)

Door Security & Safety Foundation

[www.DoorSecuritySafety.org](http://www.DoorSecuritySafety.org)

# NASFM Recommendations



## The National Association of **STATE FIRE MARSHALS**

### **School Security – Suggested Classroom Door Checklist**

- ☐ The door should be lockable from inside the classroom without requiring the door to be opened<sup>1</sup>
- ☐ Egress from the classroom through the classroom door should be without the use of a key, a tool, special knowledge, or effort<sup>2</sup>
- ☐ For egress, unlatching the classroom door from inside the classroom should be accomplished with one operation<sup>3</sup>
- ☐ The classroom door should be lockable and unlockable from outside the classroom<sup>4</sup>
- ☐ Door operating hardware shall be operable without tight grasping, tight pinching, or twisting of the wrist<sup>5</sup>
- ☐ Door hardware operable parts should be located between 34 and 48 inches above the floor<sup>6</sup>
- ☐ The bottom 10 inches of the “push” side of the door surface should be smooth<sup>7</sup>
- ☐ If the school building does not have an automatic fire sprinkler system, the classroom door and door hardware may be required to be fire-rated and the door should be self-closing and self-latching<sup>8</sup>
- ☐ If the door is required to be fire-rated, the door should not be modified in any way that invalidates the required fire-rating of the door and / or door hardware<sup>9</sup>

In the Suggested Classroom Door Checklist, “should” is used throughout. However, based upon building codes, life safety codes, fire codes, and federal, state, and / or local laws and regulations that are applicable to a particular school, these requirements may be MANDATORY.

# NASFM Recommendations

- ❑ The door should be lockable from inside the classroom without requiring the door to be opened





# Locksets currently available:

- Traditional Classroom Lockset
- Security “Intruder” Classroom Lockset
- Entrance/Office Lockset
- Storeroom Lockset
- Electronic Access Control Lockset

# Traditional Classroom Lockset:

- Turning the key in the outside lever locks or unlocks the outside lever.



PROS	CONS
Locksets can be locked or unlocked during certain time periods for convenient access	<u>Teachers must open the door to lock the outside lever</u> if it is unlocked, exposing themselves and others to risk
Only authorized personnel can lock or unlock doors	Processes must be in place to assure the locksets are locked when necessary
Lever always unlocked from inside allowing free egress from room	Keys must be issued to provide for lockdown to part-time and substitute staffing
	Lockdown is manual and accomplished mechanically

# Security Classroom Lockset:

- Turning the key in the inside or outside lever locks or unlocks the outside lever.



PROS	CONS
Locksets can be locked or unlocked during certain time periods for convenient access	Processes must be in place to assure the locksets are locked when necessary
<u>Outside lever can be locked by key in inside lever from inside room</u>	Keys must be issued to provide for lockdown to part-time and substitute staffing
Indicators identify door locked/unlocked position	Lockdown is manual and accomplished mechanically
Only authorized personnel can lock/unlock doors	
Lever always unlocked from inside allowing free egress from room	

# Security Classroom Lockset:

- A great product that is often misunderstood.
  - The inside cylinder should be keyed to a common key, and is not intended to match the corridor cylinder. This would allow any authorized person to escape into any room and be capable of locking the door.
  - The inside cylinder locks the outside lever only, the inside remains free for egress.





# Entrance/Office Lockset:

- Turning or depressing button or rotating turnpiece inside locks outside lever



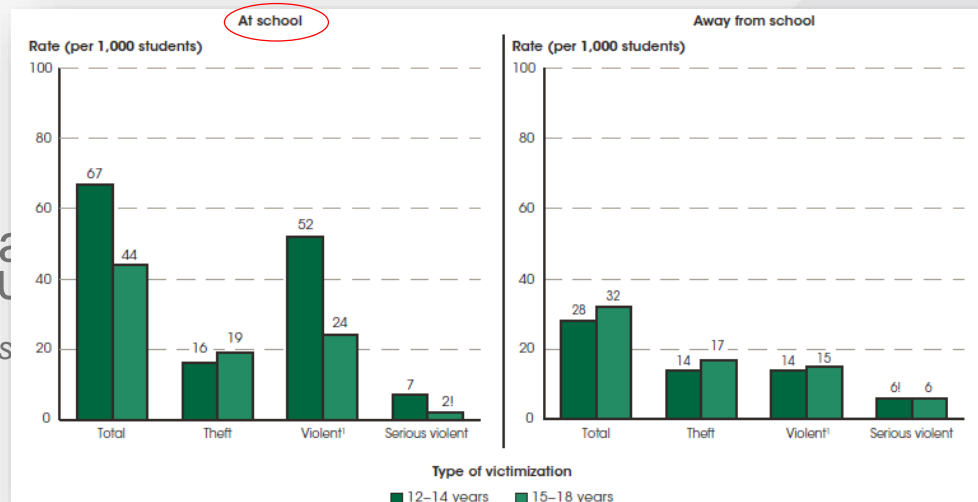
PROS	CONS
Locksets can be locked or unlocked during certain time periods for convenient access	Processes must be in place to assure the locksets are locked when necessary
Outside lever can be locked from inside room	Doors can be locked by anyone, including an assailant or intruder
Indicators on some locks identify door locked/unlocked position	Lockdown is manual and accomplished mechanically
Lever always unlocked from inside allowing free egress from room	

# Entrance/Office Lockset:



- Some statistics:

- In 2013, students ages 12-18 were victims of about 1,420,900 nonfatal victimizations at school. Roughly, 55 crimes per 1,000 students.



# Storeroom Lockset:

- Outside lever is always locked, cannot be unlocked.

PROS	CONS
Locksets are always locked from outside	Doors are always locked when closed, may be inconvenient for student access once class has begun
Lever always unlocked from inside allowing free egress from room	

# Electronic Access Control:

- Locking/Unlocking controlled electronically.

PROS	CONS
Doors can be locked from a central command station (i.e. office) or remote fob offering facility lockdown immediately or near immediate	\$\$ May be expensive to retrofit all doors with access control locksets (hardwired or wireless)
Doors cannot be locked by unauthorized personnel (depending on function)	
Lever always unlocked from inside allowing free egress from room	





# NASFM Recommendations

- ❑ Egress from the classroom through the classroom door should be without the use of a key, a tool, special knowledge or effort

# NASFM Recommendations

- ❑ For egress, unlatching the classroom door from inside the classroom should be accomplished with one operation

# NASFM Recommendations

- ❑ The classroom door should be lockable and un-lockable from outside the classroom

# NASFM Recommendations

- ❑ Door operating hardware shall be operable without tight grasping, tight pinching, or twisting of the wrist

# NASFM Recommendations

- ❑ Door hardware operable parts should be located between 34 and 48-inches above the floor



# NASFM Recommendations

- ❑ The bottom 10-inches of the “push” side of The door surface should be smooth

# NASFM Recommendations

- ❑ If the school building does not have an automatic fire-sprinkler system, the classroom door and door hardware may be required to be fire rated and the door should be self closing and self latching

Doors required to be fire rated are required to be self closing and self latching to assure they are closed and latched in the event of a fire.

# NASFM Recommendations

- ❑ If the door is required to be fire rated, the door shall not be modified in any way that invalidates the required fire rating of the door and/or door frame.

# NASFM Recommendations

The National Association of State Fire Marshals is not recommending the use of barricade devices:

**WHEREAS, when selecting hardware which allows classroom doors to be lockable from inside the classroom, consideration should be given to the risks and potential consequences of utilizing a device which blocks the classroom door from the inside. For example, devices which prevent classroom doors from being unlocked and openable from outside the classroom may place the inhabitants of the room in peril. In addition to the requirement that classroom doors must be unlatchable in a single motion from inside the classroom, these doors should always be unlockable and openable from outside the classroom by authorized persons.**

# Barricading Devices



WHEN LIVES ARE THREATENED, YOU HAVE TO ACT FAST.

*A product developed by educators who understand the need to quickly secure a door from the inside during a crisis.*

The Sleeve™ is a simple and proactive way to secure a door from the inside. It encases the door closer with a specially designed, slide-on cover made of solid carbon steel.

The Sleeve™ allows a person to secure a door within seconds without entering dangerous situations.





# Barricade Devices

- Do not comply with Accessibility regulations
- Do not comply with egress requirements in 101 – *Life Safety Code*. NFPA
- May not comply with fire door requirements in NFPA 80 – *Fire Doors and Other Opening Protectives*
- Do not allow for access by First Responders

*Other Emergencies, such as fire, are statistically 3 times more likely to occur than an active shooter situation\**

\* “Finding Reasonable Solutions to the Problem of School Safety.” April Dalton. *Doors & Hardware*, March 2015

# Barricading Devices

NightLock Door Brace

\$49.95 per unit

# Something to Consider...

*In a study “Barricaded Hostage and Crisis Situations in Schools: A Review of Recent Incidents”*

*19 school hostage events, that occurred in 14 states in the US, between February 1998 and May 2007 were described.*

*16 of the incidents were committed by Students.*

*Is it safe to provide a barricade device adjacent to all of your classroom doors?*



# 7 Lessons Learned from Sandy Hook

(Campus Safety Magazine)

1. Actions by school personnel saved lives.
2. Locking interior doors worked.
3. Lockdowns must be implemented quickly.
4. All school staff must be trained and empowered to act.
5. Staff, students must be taught how to respond under stress and on the fly.
6. Sandy Hook principal probably didn't have a chance to fight back.
7. Rumors after Sandy Hook prompted many schools to implement unproven strategies.

We Want to Enable  
Schools to Focus on What  
is Really Important...

# Education





This concludes The American Institute of Architects  
Continuing Education Systems Course

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# Thank You

Best Access Solutions, Inc.  
Stephen F. St. Amour AHC, CDT  
Director of Architectural Services, US  
T 615.605.6222  
[Stephen.stamour@dormakaba.com](mailto:Stephen.stamour@dormakaba.com)

dormakaba 



**STANLEY**



# SHELTER



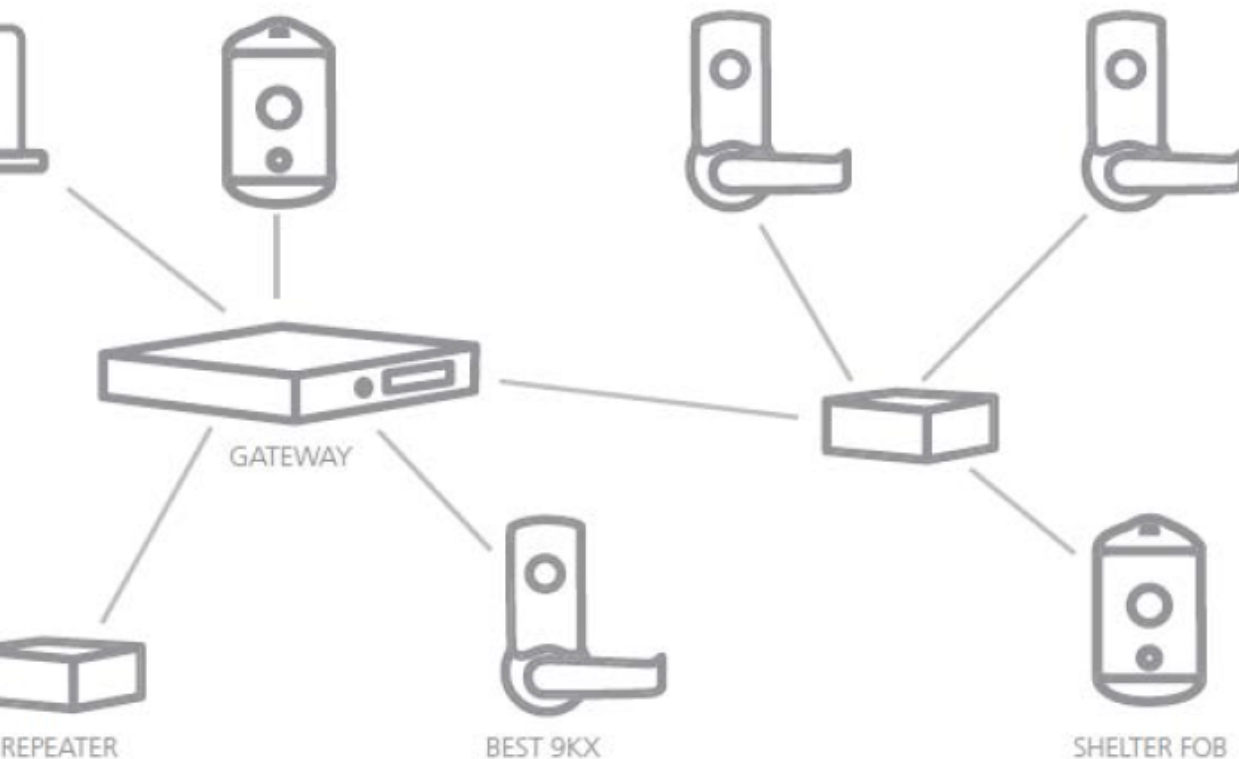
## SIMPLY SECURING SAFE SPACES





SHELTER is a wireless responsive lockdown solution that can be fully red to adapt to your building and security protocol. With SHELTER, be confident your building is ready to respond in any situation. Working with first response systems and electronic access control systems, SHELTER can be an essential part of any building security system.

### A Responsive Lockdown Solution



**SHELTER**   
CHOOSE THE **BEST** RESPONSE



# Options & Applications

## Package 1



- ✓ Tie into existing alarm and access control systems
- ✓ Fob/gateway/repeater can be a wireless alarm system IF existing tie-ins are available

## Package 2



The PRECISION Electric Exit Device with SHELTER™ technology controls entry by remote locking or unlocking of the outside trim.

- ✓ Use a PHI Electric Exit device to lock trim
  - Available in a kit to upgrade current PHI devices
  - Competitive exit devices have similar trim solutions
- ✓ Can be used for exterior doors, hallway doors, common area doors...

## Package 3



The PRECISION Electric Exit Device with SHELTER™ technology controls entry by remote locking or unlocking of the outside trim.

- ✓ Full scale solution with the 9KX
- ✓ Near immediate lockdown of all doors
- ✓ Relay integration to existing installed platforms



## DESIGNING SAFE LOCKDOWN IN ALL ENVIRONMENTS

Every environment is unique from how a building is designed, to who occupies it and how traffic flows through it. There is no lockdown solution that fits all aspects of every type of building. That's why you need a lockdown solution that can be configured to *your* environment. Shelter is that solution.



Simply Securing Safe Spaces

**SHELTER** **d**  
CHOOSE THE BEST RESPONSE



## DESIGNING SAFE LOCKDOWN IN ALL ENVIRONMENTS

Unlike any other lockdown solution on the market, Shelter is:

- Responsive in a lockdown situation the way you've pre-determined
- Scalable so it can be applied to one room or space, or an entire building- all at your pace
- Configurable so it can adapt to your building, people and security protocol

Shelter should be a fundamental part of the security strategy for:

- Public institutions, including K-12 and higher education schools and campuses, healthcare facilities and government buildings
- Commercial facilities, such as office spaces and retail areas
- Industrial buildings, such as warehouses and distribution centers







## WHY SHELTER IS BEST

This simple, affordable solution ensures appropriate lockdown- and protection of your school's most valuable asset- so your school can focus on your main purpose: teaching and learning.



**Engineered by Experts**



**Easy Installation and Maintenance**



**Cost-Effective Customization**



**Nationwide Support**

# NASFM Recommendations

















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# SHELTER vs. Competition

				
Safe •NFPA Code compliant				
Responsive •tie into existing systems				
Configured •one door / many doors lock down				

Simply Securing Safe Spaces

**SHELTER**   
CHOOSE THE **BEST** RESPONSE

**SHELTER**  <sup>TM</sup>

CHOOSE THE **BEST** RESPONSE