

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities*, <http://www.ncef.org/safeschools/index.cfm>.

Location \_\_\_\_\_ Date \_\_\_\_\_

## 1. General

■ Is access into the building(s) 100 percent controllable through designated, supervised, or locked entry points, including windows and service entries?

Yes  No  Not applicable  Further study

Note:

■ Is entry granted by supervising staff or through the use of proximity cards, keys, coded entries, or other devices?

Yes  No  Not applicable  Further study

Note:

■ Can portions of the school that are not being used be readily secured? This can be accomplished by locking wing doors or accordion-style gates or other means, provided emergency egress is not blocked.

Yes  No  Not applicable  Further study

Note:

■ Are there entry signs, in all relevant languages and with simple maps or diagrams where needed, to direct visitors to designated building entrances?

Yes  No  Not applicable  Further study

Note:

■ Where appropriate, do signs warn in a friendly but firm way about trespassing and illicit behavior and cite applicable laws and regulations?

Yes  No  Not applicable  Further study

Note:

## 2. Exterior Doors

■ Is the number of exterior doors minimized? Can they be?

Yes  No  Not applicable  Further study

Note:

■ Are all exit doors and gates equipped with emergency exit hardware and not locked or secured by any other means? Under no circumstances may exit doors be otherwise locked or chained shut. See Section 15.2.2.2 of the NFPA *Life Safety Code* for existing educational buildings (for new educational buildings, see the *International Building Code*, Section 1008.1.8, and the NFPA 101 *Life Safety Code*, Section 14.2.2.2).

Yes  No  Not applicable  Further study

Note:

■ Are all exterior doors designed to prevent unauthorized access into the building?

- a) Exterior doors should have as little exposed hardware as possible.
- b) Exterior doors should be equipped with hinges with non-removable pins.
- c) Exterior exit-only doors do not need handles and locks protruding on the outside. However, it should be possible to open the doors from outside during an emergency in some manner, such as with a proximity card.
- d) Exterior doors should be constructed of steel, aluminum alloy, or solid-core hardwood.
- e) Exterior door frames should be installed without excess flexibility to deter vandals from prying them open.
- f) Exterior glass doors should be fully framed and equipped with breakage-resistant tempered glass.

- g) Exterior door locks used as the primary means of security should be mounted flush to the surface of the door.
- h) Exterior doors should not rely on key-in-knob or other protruding locking devices.
- i) Exterior swinging doors should have a minimum 1-inch deadbolt lock with a 1-inch throw bolt and hardened steel insert, a free-turning brass or steel tapered guard, and, if glass is located within 40 inches of the locking mechanism, double cylinder locks.
- j) Panic bar latches on exterior doors should be protected by pick plates to prevent tools and plastic cards from releasing the bolt.
- k) Exterior doors with panic push-bars should be equipped with tamper-proof deadbolt locks to prevent easy exit after school hours by criminals or vandals. They should also be equipped with an astragal (metal plate) covering the gap between the doors.
- l) The armored strike plate on exterior doors should be securely fastened to the door frame in direct alignment to receive the latch easily.
- m) Key-controlled exterior doors can be equipped with contacts so they can be tied into a central monitoring and control system.
- n) Exterior double doors should be equipped with heavy-duty, multiple-point, long flush bolts.
- o) Doors that are vulnerable to unauthorized use, when students open them from inside the building, can be made more secure by installing door alarms, delayed opening devices, or sensors or cameras monitoring doors from the central office.

Yes  No  Not applicable  Further study

Note:

■ Are exterior doors sized and arranged to reduce congestion and avoid crowding? Multiple single doors reduce congestion and are recommended over double doors. Wider-than-normal (oversize) doors accommodate movement of equipment and supplies and are recommended for accessible entries and for music, vocational technology, kitchen, and receiving areas.

Yes  No  Not applicable  Further study

Note:

■ Do exterior doors have narrow windows, sidelights, fish-eye viewers, or cameras to permit seeing who is on the exterior side?

Yes  No  Not applicable  Further study

Note:

■ Are windows and sidelights sized and located so that if they are broken, vandals cannot reach through and open a door from the inside?

Yes  No  Not applicable  Further study

Note:

■ Are exterior doors airtight? Airtight doors not only improve energy efficiency but they retard interior contamination during a hazardous chemical or other harmful outdoor release.

Yes  No  Not applicable  Further study

Note:

■ Are exterior doors designed and certified to resist thrown or wind-blown objects?

Yes  No  Not applicable  Further study

Note:

### 3. Exterior Walls

■ Do exterior walls provide niches or blind spots that provide places to hide?

Yes  No  Not applicable  Further study

Note:

■ Are building niches and recesses fenced off, well lit, or observable from inside the building?

Yes  No  Not applicable  Further study

Note:

■ Do walls provide footholds, or are the top 3 to 4 feet nearest the roof non-climbable?

Yes  No  Not applicable  Further study

Note:

#### 4. Windows

■ Are windows used to enhance natural surveillance of courtyards and school grounds and parking lots, especially from classrooms and administration areas? Windows in administrative areas are particularly important for helping staff monitor the main entrance area and the school grounds around it.

Yes  No  Not applicable  Further study

Note:

■ Do all windows lock securely? Do sliding windows have lift and slide protection? California suggests avoiding sliding and casement windows, which are associated with security problems, and any operable windows with crank and worm-gear openers, which tend to break or jam.

Yes  No  Not applicable  Further study

Note:

■ Are window hardware and frames in good condition, and are transom windows or other window configurations that have clear security weaknesses either permanently closed (provided they are not to be used as a means of emergency egress) or reinforced with slide bolts or other security devices?

Yes  No  Not applicable  Further study

Note:

■ Are windows located strategically, providing natural light and natural surveillance, while providing sufficient stand-off distance and the means to deter vandalism and forced entry?

- Glass replacement is the highest routine maintenance cost for some schools.
- Consider incorporating skylights (but only if roofs are fully protected from climbers), solar light tubes, clerestory windows, and light shelves in lieu of normal-height windows in exposed or vulnerable locations. Some school districts prohibit skylights because they are considered impossible to protect from climbers.
- Clerestory windows allow for ventilation, light, and privacy while minimizing wall penetrations, but do not allow for natural surveillance.
- California suggests that ground floor windows be eliminated where possible on the building perimeter, but this must be weighed against the need for natural light and ventilation in occupied areas and the loss of visual surveillance of school grounds.

Yes  No  Not applicable  Further study

Note:

■ Are windows designed to serve as a secondary means of escape blocked by screens, security grills, louvers, awnings, or other devices, and are they readily opened from the inside? In Florida, security grills or louvers may be used if they open in one operation with the secondary means of egress.

Yes  No  Not applicable  Further study

Note:

■ Are second-floor windows inaccessible or protected against entry?

Yes  No  Not applicable  Further study

Note:

■ Are basement windows protected from unauthorized entry by security grills or window well covers?

Yes  No  Not applicable  Further study

Note:

■ Does tempered and wired glass meet the building code and Consumer Product Safety Commission's requirements when used in doors, sidelights, locations near the floor, and other "hazardous" locations? The 2003 edition of the International Building Code no longer permits wired glass to be used in K-12 facilities, but newer fire-rated glass products may be used in its place.

Yes  No  Not applicable  Further study

Note:

### 5. Windows in High Risk Areas

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

- The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.
- Bullet resistant glazing should meet the requirements of UL 752.
- Security glazing should meet the requirements of ASTM F1233 or UL 972.
- Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

Yes  No  Not applicable  Further study

Note:

### 6. Roofs

■ Is built-in roof access from inside the building only? Is the access point locked and located inside a secure room? Some schools apply slippery finishes or coatings to exterior pipes and columns to block unauthorized access to the roof. (In new buildings, the use of permanent exterior roof access ladders or exterior building materials and architectural elements that allow climbing to obtain roof access should be avoided.)

Yes  No  Not applicable  Further study

Note:

■ Are mechanical equipment enclosures on the roof protected from unauthorized access or vandalism?

Yes  No  Not applicable  Further study

Note:

■ Is access into the school through skylights blocked by security grilles or other devices?

Yes  No  Not applicable  Further study

Note:

■ Are roof parapets low enough to allow visual surveillance of the roof from the ground?

Yes  No  Not applicable  Further study

Note:

■ Are heavy roofing materials such as tile and slate securely attached to the structure, especially over points of egress?

Yes  No  Not applicable  Further study

Note:

■ Are falling roof tiles a safety hazard?

Yes  No  Not applicable  Further study

Note:

### 7. Canopies, Awnings, Breezeways, and Covered Walkways

■ Do covered walkways and adjoining posts, structures, walls, planters, or other building features provide climbing access to adjoining windows, roofs, or other upper-level areas?

Yes  No  Not applicable  Further study

Note:

■ Are covered walkways and their surroundings adequately lit to promote visual surveillance while in use?

Yes  No  Not applicable  Further study

Note:

■ Do windows in occupied areas of the building overlook walkways for natural surveillance?

Yes  No  Not applicable  Further study

Note:

■ Are exterior entrance canopies and walkways engineered to withstand high winds and seismic activity?

Yes  No  Not applicable  Further study

Note:

## 8. Courtyards

■ Are lines of sight across courtyards unobstructed so one person can supervise the entire area?

Yes  No  Not applicable  Further study

Note:

■ Are entries into courtyards from the exterior of the school controlled and lockable?

Yes  No  Not applicable  Further study

Note:

■ Are courtyard entries next to administration or staff spaces, with windows permitting visual surveillance?

Yes  No  Not applicable  Further study

Note:

■ Are courtyards configured to eliminate unauthorized after-hours access?

Yes  No  Not applicable  Further study

Note:

■ Do windows in occupied areas of the building overlook courtyards?

Yes  No  Not applicable  Further study

Note:

■ Are courtyard entry doors wide enough to prevent congestion? Avoid using swinging doors that must be held open by students. Mishaps at swinging doors are a common cause of fighting, especially in middle schools.

Yes  No  Not applicable  Further study

Note:

■ Are outer courtyard walls climbable and are outside seating, planters, and landscaping features far enough from courtyard enclosures to eliminate climbing opportunities?

Yes  No  Not applicable  Further study

Note:

## 9. High Value Targets

■ Are high-value targets for theft, such as offices, computer rooms, the media center, music rooms, shops, and chemical storage areas, protected by high security locks and an alarm system, or is at least one all-purpose storage room available for storing valuables? Note that chemicals must be stored separately.

Yes  No  Not applicable  Further study

Note: