

DESIGN GUIDELINES

Building Construction

EXTERIOR

- Coordinate the design with the local jurisdiction from the beginning of the project. Comply with base and local guidelines.
- Use durable low maintenance materials. These include masonry, concrete, and stone.
- Window/door hardware and glazing shall meet AT/ FP design requirements.
- Though the design should have enough variation in form to be interesting and meet local design criteria, avoid creating niches and hidden building areas which create security "blind spots".
- A hierarchy of entrances should allow visitors to easily find their way to the main entry. Additional prominent entries for athletic or arts facilities may make this more difficult. In addition, site limitations may require the use of entries other than the main entry for student arrival and dismissal.
- Light all exterior doors.

FACILITY ELEVATIONS

Although project site and Base Master Plans have a major impact on overall building design and its associated elevation, there are several dictates that should be followed:

- Education facilities should be three (3) floors maximum. Two stories is the preferred solution.
- In accordance with National Life Safety codes, Grades 1 and below shall be placed on the 1st (Ground) floor. Second grade cannot be above the second floor.

- For design purposes, it is recommended that approximately 60 percent of the classrooms and major school support functions be placed on the 1st (ground) floor.
- A split-level facility may be considered where terrain/ site elevations dictate, thus allowing students to move either up or down one floor for classroom access.
- Facility designs shall take into consideration AT/FP progressive collapse criteria and local area seismic requirements.

INTERIOR

- Use durable low maintenance materials.
- Comply with all Anti-Terrorism / Force Protection standards to include access control.
- Create easily supervised and understood circulation paths.
- Place vertical circulation in locations that allow arriving and departing students to quickly move to the appropriate floor without traversing other floors.
- Use variation in ceiling heights to call attention to entries. Use this variation to create a hierarchy that calls more attention to special one-of-a-kind rooms (Information Center) over typical instructional spaces.
- Zone spaces that may be used after hours by the public so that they can be closed off from the remainder of the facility. Provide a means of securing these assembly spaces so that users do not gain access to the entire facility when attending a function. Public restrooms must be included in the segregated area.
- Provide for ADA Accessibility.
- Areas of refuge, fire and smoke compartmentalization should be considered.

UTILITY SYSTEMS (HVAC/ELECTRICAL/ MECHANICAL/COMMUNICATIONS)

- Utility systems should be located in the facility where they are not intrusive, and located for easy maintenance access for major system components subsequent to construction.
- Electrical/Mechanical support tie-ins to the facility shall be underground.
- Designers shall develop interior HVAC/Electrical/ Mechanical/Communication "corridors" in the building for easy maintenance access and future upgrades.
- Comply with AT/FP design standards.
- As new and renovated facilities become more "closed" due to new AT/FP glazing and frame requirements, HVAC becomes more an issue. Facilities should have a minimum of four (4) changes of air ventilation per hour. All areas should be designed for forced ventilation with or without air conditioning.
- The facilities HVAC system design should be in accordance with ASHRAE 62 and local host nation requirements as applicable.
- Air conditioning should be provided in geographical areas where it is required. Engineers and school administrators need to check with their assigned Area Office to determine if air conditioning is applicable to their particular geographical area.
- Electrical outlets located near sinks must be GFCI, per code.
- All administrative offices and technology areas should have ample electrical outlets installed. In offices, provide one duplex receptacle per wall, minimum.

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