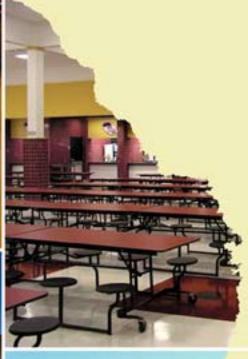
# STATE REQUIREMENTS EXISTING EDUCATIONAL FACILITIES

A GUIDE TO CODE REQUIREMENTS FOR FLORIDA SCHOOL DESIGN EXISTING FACILITIES, FLORIDA DEPARTMENT OF EDUCATION













# HANDBOOK FOR THE STATE REQUIREMENTS FOR EXISTING EDUCATIONAL FACILITIES

# SREF CHAPTER 5 and STATE FIRE MARSHAL RULE 69A-58

A Guide to Code Requirements for Florida School Design Existing Facilities
Florida Department of Education

2012

# Handbook for the State Requirements for Existing Educational Facilities

This document contains material reproduced or referenced from the 2010 Florida Building Code, the State Requirements for Educational Facilities (SREF 2012), the State Fire Marshal Rule 69A-58, "Firesafety in Educational Facilities," the Department of Education Statute Chapter 1013, the State Fire Marshal Statute 633, the 2012 Florida Accessibility Code for Building Construction, and other codes and standards related to safety in public schools and state colleges. They are used by permission of the International Code Council, the Florida Department of Education, and the State of Florida Fire Marshal.

This document cannot be sold without the express permission of the Florida Department of Education. While the authors have done their best to ensure that any advice, recommendation, interpretation, or information given herein is accurate, no liability or responsibility of any kind (including liability for negligence) is accepted by the authors or the Florida Department of Education.

The document contains only excerpts from "State Requirements for Educational Facilities" (SREF, 2012) and State Fire Marshal Rule 69A-58, "Firesafety in Educational Facilities" and does not duplicate all the requirements for any particular subject found in the above regulations or in the Florida Building Code. Users should review all requirements found in SREF 2012, SFM Rule 69A-58, and the Florida Building Code for omissions in excerpts in those documents represented here.

Research for this project to develop the 2012 Handbook for the State Requirements for Existing Education Facilities was conducted by a research team at the University of Florida, School of Architecture, in collaboration with a steering committee appointed by the Florida Department of Education, Office of Educational Facilities. Funding for the project was provided by the Florida Department of Education.

University of Florida School of Architecture Gainesville, Florida

Research Team Members

Principal Investigator & Project Manager Michael W. Kuenstle, AIA

Associate Professor, School of Architecture

Co-Principal Investigators Nancy M. Clark

Assistant Director Graduate Programs
Associate Professor, School of Architecture

N. O. Nawari, Ph.D., P.E.

Assistant Professor, School of Architecture

Richard Schneider, Ph.D., AICP Professor, Department of Urban and

Regional Planning

Consultant Joseph A. Garcia, AIA

Project Manager, University of Florida,

Physical Plant Division

Consultant

Research Team Members, continued

Copy Editor Caleb Sheaffer

Information and Communication Services
Institute of Food and Agricultural Sciences

University of Florida

UF Graduate Student Assistants Jeffrey K. Anderson

Ernesto L. Alonso

**Steering Committee Members** 

Mark Cavinee Jon Hamrick, Architect

Coordinator, Building and Fire Code Florida Department of Education

Osceola County School District

Construction Planning & Design Manager
Plan Review/Assistance, Building Official

Vivian DeRussy

Facilities Planning and Construction David Lee

St. Petersburg College

Building Code Administrator

St. Johns County School District

Charles Frank

Operations Review Specialist Darrell Phillips, Architect

Division of State Fire Marshal Florida Department of Education

Plans Reviewer,
Mark Gardner FBC & SREF Trainer

Facilities Planning Office David Sherpitis
Walton County School District Fire Safety Inspector

Building Department

School District of Palm Beach County

Other Contributors

Director of Facilities

Special thanks to Jack Villagomez, Senior Projects Architect, Florida Department of Education, for his contributions to the handbook project.

The handbook cover design was created by Ernesto L. Alonso. School buildings shown on the cover are Berkshire Elementary, Palm Beach County School District, designed by Cubellis Associates and Suncoast Polytechnical High School, Sarasota County School District, designed by Schenkel Shultz.

Int	roductionviii
	ATE REQUIREMENTS FOR EXISTING EDUCATIONAL FACILITIES - Chapter 5 apter 5
(1)	Administration
(2)	Site
(3)	Concrete
(4)	Masonry
(5)	Metals
(6)	Wood

(7)	(a) Thermal Insulation.  (b) Vapor Barriers.  (c) Roofing.
(8)	Doors and Windows.  (a) Doors and Windows.  (b) Doors.  (c) Hardware.  (d) Glazing.  (e) Windows.
(9)	Finishes
(10)	(a) General Safety Requirements. (b) Potential Hazards. (c) Separation of Spaces. (d) Marker Boards and Tackboards. (e) Toilet Partitions. (f) Toilet and Bath Accessories. (g) Diaper Changing Stations. (h) Pest Control. (i) Interior Signage. (j) Demountable Partitions. (k) Automated External Defibrillator.
(11)	(a) Fire Blankets. (b) Vault Doors and Security Systems. (c) Waste Compactors and Destructors. (d) Waste Chutes and Collectors. (e) Residential Appliances. (f) Built-In Cabinets and Casework. (g) Athletic and Recreational Equipment. (h) Shooting Range. (i) First Aid Kit.
(12)	(a) Hazardous Materials. (b) Freestanding Manufactured and Custom Casework. (c) Plastic Laminate. (d) Window Coverings. (e) Floor Mats and Grates. (f) Auditorium and Theater Seating. (g) Built-in Tables and Fixed Seating. (h) Furnishings and Equipment.

(13)Special Construction	33
(a) Accessibility Requirements.	
(b) Ancillary Facilities.	
(c) Assembly Occupancies (Within Educational Facilities).	
(d) Auxiliary Spaces.	
(e) Boiler Rooms.	
(f) Child Care/Day Care Facilities.	
(g) Clinics (School).	
(h) Clinics (Full-Service School Program).	
(i) Clinics (Florida Colleges).	
(j) Florida Colleges.	
(k) Dormitories.	
(I) Energy Conservation.	
(m) Incinerators.	
(n) Stadiums, Grandstands, and Bleachers.	
(o) Kilns.	
(p) Kitchen and Food Service Facilities.	
(q) Laboratories and Shops.	
(r) Library and Media Centers.	
(s) Open Plan Schools.	
(t) Performing Arts Theaters and Auditoriums (Serving the Public).	
(u) Pools.	
(v) Shade/Greenhouses.	
(w) Stages.	
(x) Storage.	
(y) Time-Out Rooms.	
(z) Walk-In Coolers and Freezers.	
(14)Relocatable Buildings	46
(a) Annual Inspection of Existing Property Required.	
(b) Standards for Existing "Satisfactory" Relocatable Classroom Buildings.	
(15) Conveying System	51
(a) Elevators.	
(b) Dumbwaiters.	
(c) Vertical Platform Lifts and Inclined Wheelchair Lifts.	
(d) Vehicle Lifts.	
// · · · · · · · · · · · · · · · · · ·	
(16) Mechanical	53
(a) Ventilation.	
(b) Plumbing.	
(17) Electrical	56
(a) Illumination.	
(b) Power.	
(c) Site Lighting.	
10, 000 - 9000	

## FIRESAFETY IN EDUCATIONAL FACILITIES: CHAPTER 69A-58, FAC

69A-58.001	Administration and General Requirements		
69A-58.002	Scope: New Construction and Existing Facilities	61	
69A-58.003	Definitions	62	
69A-58.0031	New Construction	64	
69A-58.004	Firesafety Inspections	66	
69A-58.0041	Charter Schools	69	
69A-58.005	Serious Life Safety Hazards	69	
69A-58.006	Vacant and Abandoned Buildings	71	
69A-58.007	Counties, Municipalities, and Independent Special Fire Control Districts Having Firesafety Responsibilities without Firesafety Inspectors	72	
69A-58.008	Standards and Requirements for Existing Buildings; Exceptions to Rule Chapter 69A-60, the Florida Fire Prevention Code	72	
69A-58.0081	Means of Egress	73	
69A-58.0082	Relocatable Buildings	79	
69A-58.0083	Protection from Hazards	81	
69A-58.0084	Seclusion Time-Out Rooms	82	
69A-58.009	Florida Firesafety School Evaluation System	83	
69A-58.010	Other Applicable Codes and Standards	84	

## APPENDIX - Handbook part 2

Abbreviations	A-4
Symbol Legend	A-5
Site Requirements/Landscape	A-6
Site Requirements/Fencing	A-8
Site Requirements	<b>A-12</b>
Site Requirements/Minimum Parking Requirements	A-16
Site Requirements/Lighting	<b>A-1</b> 8
Site Requirements/Playground Safety	A-20
Building Materials	<b>A-2</b> 8
Insulation and Moisture Protection	<b>A-30</b>
Doors and Windows	<b>A-3</b> 4
Acceptable Lockset Functions and Hardware	A-36
Door Fire-Rating Labels	<b>A-3</b> 8
Safety and Fire-Rated Glazing	<b>A-4</b> 0
Finishes	<b>A-4</b> 4
Stairs	<b>A-4</b> 6
Handrail at Stairs	<b>A-4</b> 8
Interior Stairs	<b>A-5</b> 0
Equipment	<b>A-52</b>
Auditorium Seating	<b>A-5</b> 4
Auditorium Aisle Widths	<b>A-5</b> 6
Grandstands and Bleachers	<b>A-5</b> 8
Kitchens and Food Service	A-60

Aisles Serving Seating at Tables	A-62
Laboratories and Shops/ Library and Media Center	A-64
Open Plan Classrooms	A-66
Shade and Green House	<b>A-6</b> 8
Platforms and Stages	A-70
Regular Stage	A-72
Legitimate Stage	<b>A-</b> 74
Relocatables for Classroom Use	A-76
Conveying Systems	A-80
Mechanical	A-82
Toilet Rooms	<b>A-</b> 84
Electrical	A-86
Number of Required Means of Egress	<b>A-</b> 88
Separation of Means of Egress	A-90
Travel Distance	A-92
Dead-End Corridors	A-94
Emergency-Rescue Openings	A-96
Fire Alarm	<b>A-9</b> 8
Florida School Evaluation System Fire Safety Evaluation System Instru	ıctions

and Worksheets

Office of Educational Facilities State Requirements for Educational Facilities section 5 application matrix

#### Introduction

This handbook is intended to help K-12 public school and college administrators as well as their staffs and maintenance personnel recognize common code violations in their buildings and on their sites that create life safety, casualty, health, and fire safety hazards. Its overall intent is to ensure a safe learning environment for all students and staff in these facilities. Throughout the text, reference is made to the "State Requirements for Educational Facilities" (SREF, 2012), the State Fire Marshal Rule 69A-58, "Firesafety in Educational Facilities," the Department of Education Chapter 1013, F.S. the State Fire Marshal Statute 633, the 2010 Florida Building Code, the 2012 Florida Accessibility Code for Building Construction, and other codes, standards, and recommendations related to safety in public schools and colleges, such as the Florida Safe School Design Guidelines (DOE, 2003).

The handbook was developed by the authors working in close collaboration with a steering committee comprised of representatives from Florida school districts and college safety inspection offices, the Florida Fire Marshal's office, and the Department of Education's Office of Educational Facilities. The handbook is designed to be an easily accessible reference document providing graphic depictions of many code violations and resulting hazards that should be identified and remediated. The goal of this work is to provide safer facilities and environments for Florida students and staff in the state's existing educational institutions.

The handbook includes three sections: (1) 2012 "State Requirements for Educational Facilities" (Chapter 5, SREF 2012), (2) the State Fire Marshal Rule 69A-58, "Firesafety in Educational Facilities," and Commentary and (3) Appendix. In the first section, the text reproduced from the SREF 2012 and the State Fire Marshal Rule 69A-58 **is printed in green and the commentary is printed in black and italicized.** In the second section, the appendix is formatted as a quick reference guide summarizing code-related issues through the use of tables and example diagram drawings and illustrations. The code requirements covered in this handbook represent only a portion of rules and regulations that may apply to existing educational facilities construction. The handbook is intended to be a general guideline for reference and should not be considered a binding interpretation.

This document contains only excerpts from "State Requirements for Educational Facilities" (SREF, 2012) and State Fire Marshall Rule 69A-58, "Firesafety in Educational Facilities" and does not duplicate all the requirements for any particular subject found in the above documents or in the Florida Building Code, Florida Fire Prevention Code or Florida Accessibility Code for Building Construction. Users should review all requirements found in SREF 2012 and in SFM Rule 69A-58.

The State Fire Marshall Rule 69A-58, "Firesafety in Educational Facilities" can be accessed from the Florida Division of State Fire Marshal's website www. http://www.myfloridacfo.com.

It is our hope that this document will serve as a general guideline and reference for use by all of the dedicated professionals involved in maintaining safety in Florida's schools and colleges.

# State Requirements for Educational Facilities Chapter 5

#### **Existing Facilities.**

This section is intended to provide for the safety, comfort, and health of occupants in existing educational, auxiliary, and ancillary facilities under a school board's or a Florida college board of trustees' jurisdiction. Except where a specific allowance is referenced, all existing educational facilities shall be held to the requirements of this edition of SREF, Chapter 5, regardless of the design date of a particular existing facility. Nothing in this section is intended to be more restrictive than a similar requirement for new construction. Each Board shall establish policies and procedures for a comprehensive program of accessibility, safety, maintenance, and sanitation for the protection of occupants in its facilities. Board policies shall include procedures for withdrawal of sites and facilities from use until unsafe or unsanitary conditions are corrected. Upon failure of the Board to take corrective action within a reasonable time, the Commissioner is authorized to order appropriate action or removal of the facility from use in accordance with Sections 1013.12(3) and (4), F.S.

Pre-K through grade 12 facilities are classified as Educational occupancies. Florida colleges are classified as Business occupancies.

#### (1) Administration.

Boards shall adopt policies and procedures for the maintenance, sanitation, and housekeeping of existing facilities to ensure the health and safety of occupants. Each Board shall conduct at least one firesafety, one casualty safety, and one sanitation inspection of each building of each educational and ancillary plant in its jurisdiction, whether owned or leased, each fiscal year, to determine compliance with this section.

Security [Crime Prevention Through Environmental Design (CPTED) and situational-crime prevention] inspections should be included (and/or be combined) with one or all of the specified inspections above, based on the "Florida Safe School Design Guidelines: Strategies to Enhance Security and Reduce Vandalism" Florida Department of Education (2003) and current best security practices.

#### (a) Annual Firesafety, Casualty Safety, and Sanitation Inspections.

Annual firesafety, casualty safety, and sanitation inspections on new construction, remodeling, or renovations shall begin one year after the issuance of a Certificate of Occupancy. All Boardowned, lease-purchased, and leased permanent buildings, relocatable buildings, auxiliary and ancillary facilities, and related sites shall be inspected annually to assess compliance with minimum firesafety, casualty safety, and sanitation standards for existing facilities. All inspectors for firesafety shall inspect educational facilities using the Florida Fire Prevention Code and State Fire Marshal Rules in Chapter 69A-58, FAC.

Annual Firesafety, Casualty Safety, and Sanitation Inspection Reports.

The firesafety, casualty safety, and sanitation inspection reports required by Section 1013.12, F.S., for all permanent and relocatable buildings, shall be submitted to the Board by June 30 of each year.

a. The inspection report shall be approved by the Board, which should forward one

copy of the completed inspection report to the person in charge of the facility and retain one copy for its files. The Board shall certify to the State Fire Marshal's office in the manner described in Chapter 69A-58, FAC, when the annual firesafety inspection has been completed. Each building of each facility shall be accounted for on the inspection form.

- b. Inspection reports shall be available for public review.
- c. The Board shall maintain with each yearly inspection report a list of corrected deficiencies from the prior fiscal year report.

#### 2. Annual Firesafety Inspections.

The Florida Fire Prevention Code and State Fire Marshal Rules in Chapter 69A-58, FAC, shall be used for firesafety inspections. Each firesafety inspection report shall include a plan of action and a schedule for the correction of each deficiency.

- a. Firesafety inspections shall be made under the direction of the fire official appointed by the Board.
- b. Firesafety inspections shall be made by firesafety inspectors certified by the State Fire Marshal pursuant to Section 633.081, F.S.
- c. The Board shall provide a copy of the firesafety inspection report to the local county, municipality, or independent fire control district within 10 days of the inspection. The report shall immediately be delivered to the local fire authority when immediate lifethreatening deficiencies are noted.
- d. In addition to a Board's annual inspections, the local county, municipality, or independent fire control district may inspect educational facilities within its fire control district. Deficiencies noted in the local fire control authority's inspection report shall include an action plan and schedule for correction of deficiencies noted in the inspection report that have been developed in conjunction with the Board's appointed fire official.
- e. The Board shall take actions to correct any immediate life-threatening deficiency noted on an inspection report or withdraw the building from use until the deficiency is corrected.

General Note: In accordance with Florida Statue 633.081, effective July 1, 2013, the classification of special state firesafety inspector is abolished, and all special state firesafety inspector certifications shall expire at midnight June 30, 2013. Any person who is a special state firesafety inspector on July 1, 2011, and who has at least 5 years of experience as a special state firesafety inspector as of July 1, 2011, may take the firesafety inspection examination for firesafety inspectors before July 1, 2013, to be certified as a firesafety inspector under this section. Upon passing the examination, the person shall be certified as a firesafety inspector as provided in section 633.081 3(b)2, F.S. See Florida Statute 633.081 for further information.

3. Annual Casualty Safety and Sanitation Inspections.
Casualty safety and sanitation inspections shall be performed by persons proficient with

applicable rules and standards. A schedule for correction of each deficiency shall be

included in the report and adopted by the Board.

#### (b) Inspections by Other Agencies.

Additional state and local agencies are authorized to inspect educational and ancillary facilities. Such agencies shall use the standards adopted by the Commissioner, including SREF, Chapter 5. In the case of conflicting requirements within the UBC, the safer or safest requirement shall apply. A specific requirement in the UBC shall prevail over requirements found in other standards or rules.

(c) Existing University and the Florida School for the Deaf and the Blind Facilities. Existing university and FSDB facilities are excluded from SREF, Chapter 5.

#### (d) Maintenance and Operations of Existing Educational Facilities.

Existing educational facilities housing pre-K through grade 12, auxiliary, vocational facilities, Florida colleges, and ancillary facilities shall comply with this section for maintenance and operation of existing educational facilities. Maintenance and operations activities shall be in compliance with the appropriate sections of these standards, the Florida Building Code, the Florida Fire Prevention Code, State Fire Marshal Rules in Chapter 69A-58, FAC, other applicable NFPA codes for existing educational facilities, OSHA regulations, and other applicable state and federal laws, codes, and regulations.

1.Annual maintenance permits may be issued by the authority having jurisdiction to facilitate routine maintenance, emergency repairs, building refurbishment, and minor renovations of systems and equipment. The permit shall be for one year. A detailed log of alterations and inspections shall be maintained. If a pattern of code violations is found, future annual maintenance permits may be withheld [see Section 553.80(6)(d), F.S.].

According to Section 553.80(6)(d), F.S., of the Florida Statue, school boards and Florida colleges may use annual facility maintenance permits to facilitate routine maintenance, emergency repairs, building refurbishment, and minor renovations of systems or equipment.

Florida Building Code, Building Chapter 1, Section 105.1.1, also allows the authority having jurisdiction to issue an annual permit to facilitate routine or emergency service, repair, refurbishing, or minor renovations of service systems or manufacturing equipment installations/relocations in lieu of an individual permit for each alteration to an existing electrical, gas, mechanical, or plumbing system or to interior nonstructural partitions.

Annual maintenance permits should not be used in lieu of an individual permit for any changes in the building structure or major renovations of service systems or manufacturing equipment installations, such as new electrical, gas, mechanical, or plumbing systems.

2. Maximum individual project limits shall not exceed \$300,000.

#### (e) Board Policies.

The Board's policies and procedures for maintenance, casualty safety, sanitation and housekeeping shall cover both existing and new facilities. These policies and procedures shall provide for program organization, financing, fiscal control, staffing, scheduling of work, and evaluation, including the following:

1. Establishing a timetable, priority listing, and funding for the correction of deficiencies

found during the annual comprehensive firesafety, casualty safety, and sanitation inspections.

- 2. Operating communicable disease control programs in accordance with DOH Rules in Chapter 64D-3, FAC.
- 3. Providing work areas that are free from recognized hazards and conducting employee safety and health programs that comply with OSHA 29 CFR.
- 4. Conducting approved firesafety training for building users, on-site facility managers, faculty, and staff involved in the process of correction of lifesafety violations noted in annual board safety inspections and the annual firesafety inspections conducted by local fire control authorities.
- 5. Operating pest management programs in accordance with the EPA's Integrated Pest Management in Schools guidelines (http://schoolipm.ifas.ufl.edu/), which employ the use of effective measures to prevent harborage, propagation, or infestations of rodents, flies, cockroaches, and other insects on school premises.
- 6. Complying with all applicable EPA and Florida Department of Environmental Protection (DEP) hazardous waste regulations, including EPA Resource Conservation and Recovery Act, Subtitle C, and DEP Rules in Chapter 62-730, FAC.
- 7. Considering Safety Checklist Program for Schools, developed by the National Institute for Occupational Safety and Health (NIOSH) (http://www.cdc.gov/niosh/docs/2004-101/default.html).
- 8. Establishing a schedule and prescribing methods for cleaning and servicing occupied facilities, including the following:
  - a. Student-occupied areas, including interior places of assembly, classrooms, corridors, and all other areas designed for occupancy by more than two persons, shall be cleaned daily. Administrative and faculty offices designed for single or double occupancy shall be cleaned at least once per week.
  - b. Toilet rooms, shower and locker rooms, drinking water fountains, and clinics shall be cleaned and disinfected daily using an appropriate Germicidal Detergent. Note: Drinking water fountains shall be rinsed or flushed with plain water after disinfection.
  - c. Food service areas, where provided, shall be cleaned and sanitized daily using an appropriate cleaning agent (tuberculocidal disinfectants are not required for cleaning food service floors).
  - d. Floor drains shall be sanitized and water flushed at least once per day.

A frequent cause of inside odors is a dry trap. All drains to a sewer system have a trap that is filled with water providing a seal to keep out sewer gases. The water will evaporate from the trap over time if the drain is rarely used and eventually the seal is eliminated, which allows sewer gas to enter the room or space. Water flushing drains is necessary to avoid this problem. Drains equipped with trap seal primers do not

#### require water flushing.

- e. Trash and waste containers shall be provided in all areas and sufficient in number to handle the daily accumulation of trash. Containers shall be emptied daily and trash shall be stored in bins or containers in a central waste disposal area until removed from the facility.
- f. Solid waste garbage, trash, and rubbish shall be collected, stored, and disposed of at a frequency and in a manner that prevents a sanitary nuisance.
- g. Filters used in conjunction with HVAC equipment shall be kept clean, serviceable, and orderly at all times, and shall be sized to prevent unfiltered air from entering the airstream.
- h. Light fixtures and window surfaces, both inside and outside, shall be kept clean, serviceable, and in good repair at all times.

Windows facing parking lots, recreational areas, and student-occupied areas, including interior places of assembly, classrooms, corridors, and all other areas designed for occupancy by more than two persons, should not be obscured by visual impediments such as architectural and building elements, so as to allow for maximum surveillance both during and after school hours.

i. Custodial areas shall be kept clean, safe, and orderly at all times. Custodial equipment shall be kept safe, serviceable, and in good repair at all times. Custodial and maintenance supplies and equipment shall not be stored in mechanical and electrical rooms.

**Exception**: Air-conditioning filters may be stored in mechanical rooms. Air conditioning filter storage shall not present a hazard.

Custodial rooms/areas must be secured to prevent access for illegitimate purposes, including becoming entrapment zones.

- j. Building components and finishes shall be kept clean and in good repair.
- 9. Housing animals on district property or in school classrooms, taking into consideration that some animals may cause or exacerbate allergic reactions, spread bacterial infections, or cause damage and create a hazard if they escape from confinement. Animals in classrooms shall be kept in a healthy condition and in appropriate cages or tanks that shall be maintained in a clean and safe condition.
- 10. Ensuring adult supervision of supplies that are to be included in first aid kits located at each school for student use.
- 11. Designating persons authorized to use automated external defibrillators and establishment of training requirements for those individuals.

#### (f) Remodeling and Renovation.

Remodeling, renovation, and correction of deficiencies of existing educational, auxiliary, and

ancillary facilities shall comply with the new construction requirements found in the Florida Building Code and the Florida Fire Prevention Code.

#### (g) Floor Plans.

On or before October 1 of each year, all school boards and Florida colleges shall provide a copy of revised floor plans and other relevant documents to the law enforcement agency and fire department that have jurisdiction over each educational facility for all facilities that were modified during the preceding year.

Floor plans and other relevant documents should be provided in digital formats as well as hard copy to facilitate storage and access of information during emergency situations. Where feasible, Geographic Information System (GIS) maps of existing facilities should be supplied to law enforcement and emergency first-responders.

#### (h) Returning Facilities to Instructional Use.

Any existing facility that has been removed from instructional use shall be inspected for deficiencies in accordance with the Florida Fire Prevention Code for an existing building and SREF, Chapter 5, before returning it to instructional use. Any remodeling, renovation, or correction of deficiencies shall be brought into compliance with the requirements in the state minimum lifesafety codes, Florida Building Code, the Florida Fire Prevention Code, state and federal laws and rules, as applicable.

#### (i) Abandoned Facilities.

Board facilities no longer in use and abandoned, but still owned, shall be maintained and secured in such a manner that will prevent safety and sanitation hazards, unlawful entry, and vandalism from occurring.

In accordance with NFPA 1 Section 10.13.1, every person owning or having charge or control of any vacant building, premises, or portion thereof shall remove all combustible storage, waste, refuse, and vegetation and shall lock, barricade, or otherwise secure the building or premises to prohibit entry by unauthorized persons.

Vacant and abandoned facilities are significant crime magnets and should be inspected periodically with a frequency as determined by the authority having jurisdiction (AHJ). It is highly recommended that such facilities be inspected at least every two months.

See NFPA 1 Section 10.13, and State Fire Marshal Rule 69A-58.006, FAC, for further information and requirements for vacant and abandoned buildings.

#### (2) Site.

Boards shall ensure that sites meet the following minimum casualty safety and sanitation requirements for landscaping, signage, fencing, etc., as applicable.

#### (a) Landscaping.

Landscaping shall comply with the following minimum standards:

1. Areas shall be landscaped by the use of trees, shrubs, grass, ground cover, mulch, hedges, or boulders.

2. The site shall be free of any poisonous, toxic, and hazardous plants.

A list of poisonous, toxic, and hazardous plants can be found in "Guide to Poisonous and Irritant Plants of Florida" by Kent D. Perkins and Willard W. Payne, published by the Florida Cooperative Extension Service Institute of Food and Agricultural Sciences at the University of Florida. This publication is available online through the University of Florida Digital Collections at http://ufdc.ufl.edu/UF00000155/00001/1j.

- 3. A program shall be in place to remove all invasive nonnative plants, such as Punk tree (Melaleuca Quinquenervia), Brazilian Pepper (Schinus Terebinthifolius), Australian Pine (Casuarina-equisetifolia), and Catclaw Mimosa (Mimosa Pigra).
- 4. Water conservation policies shall be incorporated in landscape maintenance programs.
- 5. Trees and landscaped areas around the perimeter of buildings shall be maintained to prevent blind spots or provide access to the roof. Trees, where provided, shall be healthy, diseasefree, and trimmed of dead, diseased, and broken branches.

Trees, shrubs, hedges, and landscape materials must be maintained to maximize view corridors and to minimize concealment areas next to buildings or pathways leading to and from parking lots, recreational areas, or student-occupied areas including interior places of assembly and classrooms. CPTED standards suggest trimming hedges and bushes to a maximum of 18 inches high and tree canopies to a minimum of eight feet.

(See Appendix, Site Requirements/Landscape.)

- 6. Road intersection visibility, on- or off-site, shall be achieved by providing a clear sight line at intersections.
- 7. The site shall be free of broken glass, metal, trash, undergrowth, and any debris that constitutes a hazard or that encourages the harborage and concealment of pests.
- 8. The entire site shall be graded and drained to prevent washouts or an unintentional accumulation of standing surface water and debris.
- 9. Washouts around buildings and entrance slabs shall be filled and stabilized to remove hazardous conditions and to prevent any further washout damage.

(See Appendix, Site Requirements/Landscape.)

10. Temporary storage containers, where provided, shall be maintained in a safe and secure condition and shall not to be used for long-term use.

Storage containers should be secured to discourage concealment for illegal activities and should be anchored to resist wind events.

11. Water shall not to be allowed to accumulate in any open containers, such as buckets or tires.

#### (b) Exterior Signage.

Site signage shall comply with the following:

- 1. Permanent or temporary exterior site signage shall be provided.
- 2. Site signage shall not create visual barriers at entrances, sidewalks, roads, or road intersections.
- 3. Accessible routes, including parking, building directories, building identification, and accessible entrances shall be marked by exterior signage in conformance with federal and state accessibility laws and codes.
- 4. External illumination of signs, where provided, shall comply with NFPA 70, the National Electric Code.
- 5. Existing permanent and temporary freestanding exterior signs shall be certified by a Design Professional as being able to withstand hurricane force winds in accordance with the Board's program.
- 6. Wall-mounted, individual letters and signs when attached to the building shall be attached in such a way so as to prevent removal, discourage climbing, and prevent building access.

Signage should be legible from adjacent streets and pathways during daytime and evening hours.

For exterior signs to be legible by a person with 20/20 vision at a distance of 50 feet, letters should be a minimum of 6 inches in height. Address or other vital information should have letters a minimum of 12 inches in height to be legible further than 100 feet from adjacent curbs. If the sign uses a symbol or graphics it should be at least 15 inches tall. Appropriate lighting (a minimum of 1-2 foot-candles) should be provided to illuminate signage, depending on the font type and color contrast of the lettering and building. (See "21st Century Security and CPTED," 2008, pp. 487-497.)

#### (c) Flag poles.

Flag poles, pulleys, and ropes, where provided, shall be in safe and workable order.

#### (d) Fencing.

Security/boundary fencing shall comply with the following:

Padlocks used for fencing must include a master key located within a Knox-Box Rapid Entry System or as approved by local fire officials for emergency vehicular access in accordance with Florida Fire Prevention Code NFPA 1 Chapter 18. As per FFPC Section 18.2.2.1, if access to or within a structure or area is unduly difficult because of secured openings or immediate access is necessary for life-saving or fire-fighting purposes, the authority having jurisdiction shall be permitted to require a key box to be installed in an accessible location. The key box shall be an approved type and shall contain keys to gain access as required by the AHJ.

(See Appendix, Site Requirements/Fencing.)

1. Fencing at play areas and athletic fields shall have at least one gate or passway to the

exterior large enough to accommodate pedestrian egress and one gate to the exterior large enough to allow access of service equipment.

State Fire Marshal Rule Chapter 69A-58.0081, FAC, "Means of Egress" requires that all gates used for egress to be side-hinged and must allow egress at all times without assistance from the side from which egress is made.

2. All pre-K, kindergarten, and day-care play areas, where provided, shall be separated from surrounding areas by a fence that is a minimum of four feet high.

Fencing is required to separate students from potential harm and shall be provided in all child care and kindergarten play area locations.

- 3. Mechanical, plumbing, and electrical equipment, when exposed, shall be locked and secured to prevent unauthorized access, but access shall be allowed for maintenance and repair.
- 4. Fences at special hazards shall be locked and secured to prevent unauthorized access, but access shall be allowed for maintenance and repair. Examples of special hazards include on-site sewage disposal plants; above-ground LP gas and fuel oil tanks; and for pre-K through grade five facilities, retention ponds with depths exceeding one foot, deep drainage ditches, canals, highways, and play fields adjacent to roadways, etc.
- 5. District warehouse, maintenance, and bus compounds shall be locked and secured to prevent unauthorized access.

These structures are significant crime attractors (magnets) and should be physically inspected periodically by qualified personnel to ensure access control integrity (including fencing, doors, walls, windows and roofs.)

6.Only ancillary plots not contiguous to an educational facility site and agricultural plots that are not contiguous to an educational facility site may have barbed wire fencing. Existing barbed wire on an educational or ancillary site shall be six feet or more above the ground. The barbs on chain link fencing, where provided, shall be turned over.

The use of razor wire, barbed wire and electrically charged systems is prohibited in all non-agricultural educational plants. Barbed wire is permitted in agricultural plots and other ancillary sites not adjacent to a school site.

(See Appendix, Site Requirements/Fencing.)

7. Fencing and gates shall be constructed of nonflammable, nonelectric, safe, durable, and lowmaintenance materials.

Fencing materials should provide the structural integrity, strength and aesthetics appropriate for the intended location.

Where feasible, fencing should be utilized that does not permit footholds that encourage climbing and easy access. Further, fencing materials should be chosen to resist graffiti.

- 8. Footings and foundations shall be protected from exposure and tripping hazards.
- 9. Fencing and gates shall be located so they do not provide access to roofs by unauthorized persons.
- 10. Fences shall be maintained in a safe condition and shall be free from jagged or sharp projections and other hazards.

#### (e) Guy Wires.

Guy wires, where provided, shall be protected with guards or markers. Guy wire anchors shall not present a tripping hazard.

#### (f) Walks, Roads, Drives, and Parking Areas.

Walks, roads, drives, and parking areas on educational and ancillary sites shall comply with the following:

Walks, roads, drives and parking areas should be observable through unobscured windows, from active observation points, or from assembly areas.

- 1. Walks, roads, drives, and parking areas, where provided, shall be paved.
- 2. Paved areas, where provided, shall be bitumen or concrete surfaced. Overflow parking spaces may use alternative surfaces.
- 3. Paved roads, drives, and parking areas, where provided, shall be striped and maintained in a condition that defines the function of the area.
- 4. All paved areas shall have positive drainage.
- 5. All paved areas shall be clean and free of debris and broken pavement or hazardous conditions.
- 6. Vehicular/Pedestrian Interface.
  - a. Passenger drop-off/loading zones shall be as close to accessible entrance(s) as possible.
  - b. A curb cut or ramp shall be provided.

Passenger drop-off areas must be observable through unobscured windows, active observation points or assembly areas using natural surveillance. If this is not feasible, electronic Closed Circuit Television (CCTV) or mechanical devices (e.g., mirrors) should be employed.

- 7. Walks/Accessible Routes.
  - a. Building entrance(s) shall be connected by an accessible walk to all accessible parking and loading/drop-off zones.
  - b. Gutters and downspouts, where provided, shall prevent stormwater from pouring

onto or draining across walks.

c. Soil, grass, or planting beds shall provide positive drainage away from walk(s).

It is recommended that soil, grass, and planting beds provide positive drainage away from sidewalks, but should not fall away at more than a three percent gradient slope for a minimum distance of five feet from the edge or should be protected with appropriate guardrails. The location of all drains, grates, drop inlets, catch basins, other drainage elements and curb cuts should be out of the main flow of pedestrian traffic.

Wheelchair-bound individuals can inadvertently drift off a sidewalk. The three percent slope for 5 feet gives a wheelchair-bound individual a fairly flat surface from which to re-access the sidewalk. Also, a step-down from the sidewalk from the adjacent zone should not be allowed. A step-down can present an obstacle that prevents an individual in a wheelchair from re-accessing the sidewalk and can also present a tripping hazard to a person walking with a cane.

Washouts due to erosion on the edge of walks/accessible routes must be corrected to meet rule requirements concerning the protection of vertical drops either through the addition of a physical barrier or by filling in the eroded area to eliminate the vertical drop.

(See Appendix, Site Requirements.)

- d. Drains, grates, drop inlets, catch basins, and other drainage elements, where provided, shall be located to the side of accessible walks.
- e. Walls, railings, or other physical barriers shall be used to define and protect any vertical drop of more than 18 inches.

Walls, railings, or other physical barriers must be maintained as designed and must conform to all requirements as set forth in the code edition under which the school was constructed as well as the minimum code requirements in SREF, Chapter 5.

(See Appendix, Site Requirements.)

- 8. Roads and streets.
  - a. On-site driveways shall be restricted from completely encircling the school plant.
  - b. Vehicular and pedestrian traffic shall be prevented from crossing each other on the site, or appropriate safety devices shall be provided where vehicular and pedestrian traffic cross.

Fire department emergency vehicular-access roads shall have an unobstructed width of no less than 20 feet; shall be designed and maintained to support imposed loads of fire apparatus; and shall be provided with an all-weather driving surface in accordance with Florida Fire Prevention Code 2010 Edition Chapter 18.2.3.4.

When a fire lane encircles a school facility, it is important to resolve potential conflicts

between pedestrians and vehicles. Appropriate safety devices must be provided, including clearly designated pedestrian crosswalks and/or the addition of personnel to monitor vehicular and pedestrian circulation during peak-use hours.

In addition, emergency access must be considered when portions of fire lanes are blocked by gates or fencing due to the potential conflict between the requirement for access during emergencies and fencing or gate lock requirements. Padlocks used for fencing must include a master key located within a Knox-Box Rapid Entry System for emergency vehicle access.

Roads and streets should not terminate in exterior assembly areas, buildings or other structures without street humps, protective barriers, bollards, or other traffic calming and access control elements designed to mitigate or prevent speeding onto or within school grounds.

(See Appendix, Site Requirements/Fencing.)

- 9. Bus Drives (where provided).
  - a. The turning radius for turning off public access streets shall be 60 feet to the outside curb for one-way traffic and 60 feet to the centerline of the driveway for two-way traffic.
  - b. Bus drives and drop-off/pick up areas shall be provided so that buses do not have to back up.
  - c. Bus driveways and parent pick up areas shall be separated from each other, or appropriate safety devices shall be provided where bus drives and parent pick up areas are not separated.

When there is a potential conflict between parent drop-off/pick-up lanes and bus driveways, appropriate safety devices must be provided, including clearly designated pedestrian crosswalks and/or the addition of personnel to monitor vehicular and pedestrian circulation during peak-use hours.

10. Vehicle parking areas.

(See Appendix, Minimum Parking Requirements.)

a. Vehicle parking areas, where provided, shall be located to facilitate supervision from the building or other vantage points.

Where economically feasible, CCTV should be utilized when parking areas are remote from buildings or other vantage points because they are the most identified location (of 27 school venues) for many types of crime and misbehaviors, such as battery, vandalism, trespassing, drug/tobacco/alcohol use, and weapons possession (Florida Safe School Guidelines, FDOE, 2003, pp. 144.)

Maintain separate, easily-observable parking areas for students, staff, faculty, and visitors. This will facilitate areas/zones that can be closed off during class periods, after school, for special events, and for security purposes.

Maintain clear signage relative to rules and appropriate behavior within or adjacent to parking areas.

Signage for visitors should direct them to one entry access control point where they sign in and sign out of the campus.

- b. Parking areas, where provided, shall comply with the minimum parking space requirements for the facility being inspected: Faculty and staff = one space for each member; high schools = one space for every 10 students above grade 10; vocational schools = one space for every two students; Florida colleges = one space for every two students; visitor parking = appropriate spaces for the facility.
- c. The total number of accessible spaces shall be provided as required by Chapter 11, 2007 Florida Building Code, Building, or the 2012 Florida Accessibility Code for Building Construction in Rule 61G20-4.002, FAC.

Parking spaces designated for persons with disabilities shall comply with the Florida Building Code, Accessibility, and Section 316.1955, Florida Statutes.

d. Parking spaces shall be separated from bus and parent drop-off/pick up drives or appropriate safety devices shall be provided.

When there is a potential conflict of parking spaces with parent drop-off/pick-up lanes and bus driveways, appropriate safety devices must be provided, including clearly designated pedestrian crosswalks and/or the addition of personnel to monitor vehicular and pedestrian circulation during peak-use hours.

11. Bicycle parking areas, where provided, shall be separated from vehicular areas, and located for easy supervision from building windows, adjacent streets, or other vantage points.

#### (g) Lighting.

Exterior light standards, guy wires, fixtures, and wiring for educational and ancillary facilities shall comply with the following:

(See Appendix, Site Requirements/Lighting.)

- 1. When the facility is occupied after dark, security lighting shall be provided for the following:
  - a. Auto, bus, and service drives and loading areas.
  - b. Parking areas.
  - c. Athletic complexes.
  - d. Building perimeter.
  - e. Covered and connector walks between buildings.

- f. Covered and connector walks between buildings and parking.
- 2. Parking area lighting standards and guy wires, where provided, shall be located in landscaped islands or perimeter planting areas, or shall be equipped with suitable protection to eliminate potential hazards.
- 3. Parking and related areas shall be illuminated to an average maintained horizontal footcandle level as follows:
  - a. Parking areas = one foot-candle.
  - b. Covered and connector walks = one foot-candle.
  - c. Parking entrances/exits = two foot-candles.
- 4. Athletic playing field surfaces and exterior spectator seating areas intended for nighttime use shall be illuminated.
- 5. Recessed doors and windows around the exterior perimeter of a building shall be illuminated at night when the facility is occupied and shall be maintained in an observable condition. Building exteriors, perimeters, and entrances shall be illuminated as follows:
  - a. Entrances = five foot-candles.
  - b. Building perimeters = one foot-candle.
- 6. Exterior lighting poles and fixtures shall be grounded.
- 7. Motion detectors, photo cells, and time clocks shall be used to control night lighting systems to provide security and to maximize energy conservation.
- 8. All exterior lighting shall be shielded to prevent light from falling onto adjacent properties.

#### (h) Transmission Line Right-of-Way.

High-voltage transmission power line rights-of-way, where provided, shall be kept free of activity and equipment that might impede power company access to the right-of-way.

#### (i) Stormwater Drainage.

A stormwater drainage system for the site shall be provided, maintained free of sand and debris, and maintained in an operational condition at all times.

#### (j) On-Site Wells and Sewage Systems.

- 1. An on-site potable water system, where provided, shall be in proper working order and comply with the Florida Safe Drinking Water Act.
- 2. Samples of on-site treated and raw water shall be taken monthly and tested for the purpose of bacteriological examination, the water supply determined to be safe, and the certificate be on file and available for inspection

3. An on-site sewage disposal system, where provided, shall be in proper working order. Pursuant to sections 381.0062 and 403.087, F.S., sewage is required to be disposed of in accordance with rules in either Chapter 62-600, FAC, Domestic Wastewater Facilities, or Chapter 64E-6, FAC, Standards for On-site Sewage Treatment and Disposal, whichever is applicable. The system shall be tested monthly, proved to be functioning properly, and the certificate be on file and available for inspection.

#### (k) Playgrounds, Equipment, and Athletic Fields.

Playgrounds, equipment, and athletic fields where provided, shall be maintained in a safe and acceptable condition for the intended function.

Playgrounds must comply with the "Public Playground Safety Handbook" published by the U.S. Consumer Product Safety Commission. This handbook provides guidelines and requirements for playgrounds in educational facilities. The handbook can be found online at http://www.cpsc.gov/cpscpub/pubs/325.pdf.

(See Appendix, Site Requirements/Playground Safety.)

- 1. Play areas and athletic fields where fencing is provided shall comply with SREF, Section 5(2)(d).
- 2. Pre-K, kindergarten, or day-care play areas, where provided, shall have direct access to and from their related classrooms or to a corridor providing immediate and safe access to the play area.

Students are permitted to exit through an egress corridor and door to access the play area. The designated fenced play area for pre-kindergarten, kindergarten, or day care must be immediately adjacent to the point of building egress.

In addition to direct access, pre-K, kindergarten, or day-care play areas should have natural surveillance. If natural surveillance is not feasible, then electronic or mechanical surveillance should be considered to keep these areas under continuous observation.

3. Play areas and athletic fields, where provided, shall have either direct access from the facility without crossing roads, traffic lanes, drives, or parking lots, or have appropriate safety devices provided where access crosses parking areas or drives.

When there is a potential conflict of vehicular traffic with play areas and athletic fields, appropriate safety devices must be provided, including clearly designated pedestrian crosswalks and/or the addition of personnel to monitor vehicular and pedestrian circulation during peak-use hours.

(See Appendix, Site Requirements/Playground Safety.)

4. Athletic and playground equipment, where provided, shall be structurally sound, maintained firm and stable, vermin-proof, free of pockets or crevices where water will collect or vermin and pests may hide, and free from jagged or sharp projections, edges, or corners. Playground equipment includes the equipment itself (backstops, swings, slides, etc.) and its structural components (foundations, supporting members, exposed fasteners, etc.).

- 5. The ground under any playground equipment provided shall be resilient material, either unitary or loose-laid, and maintained to prevent injury.
- 6. Covered play areas, where provided, shall have positive drainage away from the center of the floor.
- 7. Related facilities such as toilets, concessions, storage, shower and locker rooms, bleachers, press boxes, observation platforms, scoreboards, and dugouts, where provided, shall be inspected under the appropriate areas of this section.
- 8. Playgrounds, equipment, athletic fields, and related facilities, where provided, shall provide for accessibility in accordance with 2012 Florida Accessibility Code for Building Construction, Rule 61G20-4.002, FAC.

#### (I) On-Site Waste Burners.

On-site waste burners, when permitted, shall be located at least 100 feet from any building, equipped with a three-quarter inch mesh wire screen, and used for burning paper and trash only.

On-site waste burners should be maintained to facilitate natural surveillance and minimize entrapment zones and hiding spaces.

#### (3) Concrete.

Exposed concrete shall meet the following minimum casualty safety and sanitation requirements for structural members, light and flag poles, walks, drives, etc., including relocatables, as applicable:

#### (a) Structural Members.

Concrete structural members, foundations, retaining walls, and framing shall be maintained in a safe condition and free from hazards, including cracks, spalling, and exposed reinforcing steel.

Structural members must be monitored for hazards such as cracks, spalling, and exposed reinforced steel. Where structural elements have visible damage, the AHJ shall be permitted to require a technical analysis prepared in accordance with FFPC Section 10.1.4 to determine if repairs are necessary to restore structural integrity. When the technical analysis recommends repairs to the structure, such repairs shall be made. (See FFPC Section 10.1.4.1.)

(See Appendix, Building Materials.)

#### (b) Concrete Poles and Furniture.

Light and flag poles, benches, tables, planters, etc., where provided, shall be maintained in a safe condition and free from hazards.

Benches, tables, planters, etc., should be maintained to minimize hiding places. To prevent entrapment hazards, the opening between any interior opposing surfaces shall not be greater than 3 1/2 inches nor be less than 9 inches.

#### (c) Walks and Drives.

Concrete walks, drives, loading docks, swimming pool decks, parking areas, etc., where provided, shall be maintained in a safe condition and free from hazards.

#### (d) Concrete Parking Structures.

Concrete parking structures, covered walkways, etc., where provided, shall be maintained in a safe condition and free from hazards.

Concrete parking structures, covered walkways, etc., should be maintained as recommended by CPTED and situational crime prevention standards that naturally reduce opportunities for misbehavior and help to ensure territorial integrity. These techniques include facilitating surveillance by using open design, installing and maintaining adequate lighting, and painting walls light colors. Additional techniques include controlling access to the parking area, marking boundaries, and inspetin and maintaining the area on a routine schedule. Together, these techniques prevent "broken windows" susceptibility, which refers to the criminology theory that well-maintained environments deter crime and vandalism.

#### (4) Masonry.

Exposed masonry shall meet the minimum casualty safety and sanitation requirements for masonry veneers, framing, benches, tables, etc., including relocatables, as applicable. Masonry veneers, walls, retaining walls, and framing, where provided, shall be maintained in a safe condition and free from hazards, including cracks, spalling, and exposed reinforcing steel.

#### (5) Metals.

Structural steel and light gauge metal framing shall meet the following minimum casualty safety and sanitation requirements for structural members, framing, light and flag poles, benches, tables, etc., including relocatables, as applicable:

#### (a) Structural Steel.

Structural steel members and light gauge metal framing for buildings shall be maintained in a safe condition and free from hazards, including rust and loose fastenings.

#### (b) Poles and Furniture.

Light and flag poles, benches, tables, etc., shall be maintained in a safe condition and free from hazards, including rust and loose fastenings.

To prevent entrapment, the vertical opening between the seat and back of benches should not have openings greater than 3 1/2 inches or less than 9 inches, as described in the Handbook for Playground Safety, Section 13.2.5.

#### (c) Parking Structures.

Steel parking structures, covered walkways, etc., where provided, shall be maintained in a safe condition and free from hazards.

#### (6) Wood.

Structural wood, casework, and cabinets shall meet the following minimum casualty safety and sanitation requirements for structural members, framing, benches, tables, etc. [see Section 5(14) for existing relocatable buildings]:

Wooden structural members, benches, tables, etc., should be maintained to minimize hiding places. To prevent entrapment hazards, the opening between any interior opposing surfaces shall

not be greater than 3 1/2 inches or less than 9 inches.

#### (a) Fire-Retardant Treated Wood (FRTW).

Permanent educational facilities shall be free of fireretardant treated wood, or appropriate safety measures, such as paint and preservatives, shall have been taken to protect the wood from deterioration, and FRTW and fasteners shall be free of corrosion and deterioration.

#### (b) Structural Members.

Wood columns, beams, joists, trusses, heavy timber construction, and other structural members shall be maintained in a safe condition and free from hazards, including loose fastenings, wood rot, chips, splits, cracks, and wood-destroying insects.

#### (c) Handrails and Ramps.

Miscellaneous blocking; trim; handrails; guardrails; boardwalks; relocatable platforms, ramps, and steps; stage and gymnasium flooring; casework; cabinets; and paneling, where provided, shall be maintained in a safe condition and free from hazards, including loose fastenings, wood rot, chips, splits, cracks, and wood-destroying insects.

See NFPA 101 Section 15.2.2.6 for further requirements regarding handrails and ramps. Utilize open handrail systems to maximize surveillance on stairs, rams, and second floor and higher balcony handrails. See baluster spacing requirements under "Specialties, General Safety Requirements."

#### (d) Chemical Treatment.

Wood in contact with concrete or masonry, or within eight inches of soil shall be protected against decay and termites by chemical treatment, termite shields, etc.

#### (e) Built-Ins and Casework.

Built-ins and casework, including plastic laminates, where provided, shall be free of sharp corners, splinters, or any construction feature, such as protruding hardware, that would be hazardous to occupants and users.

#### (f) Wood Floors.

Wood floors, where provided, shall be free of loose or broken boards, holes, uneven projections, protruding nails, splinters, and other tripping hazards.

#### (7) Insulation and Moisture Protection.

Insulation and moisture protection (including relocatables) shall meet the following minimum casualty safety and sanitation requirements for roofing, fireproofing, firestopping, etc., as applicable:

#### (a) Thermal Insulation.

Thermal insulation, where provided, shall be visible for inspection in such spaces as attics, crawl spaces, duct work, mechanical rooms, etc.; protected from the weather; and held securely in place.

#### (b) Vapor Barriers.

Vapor barriers, where provided, shall be visible for inspection in such spaces as attics, crawl spaces, mechanical spaces, insulated ducts, chilled water lines, etc.; located on the exterior

side of thermal insulation; protected from the weather; and held securely in place.

#### (c) Roofing.

Roofing systems, including flashing, gutters, downspouts, roof drains, membrane, roof penetrations, etc., where provided, shall be watertight, held securely in place, free of debris, and maintained in good condition.

Roofs should be periodically inspected and maintained and secured to prevent unauthorized roof access. Secure roof access should be maintained with lockable type roof hatches that comply with the Fire Marshal's code. Use security grills to minimize access through all types of skylights.

Roofing systems should be screened and vermin-proofed.

(See Appendix, Insulation and Moisture Protection.)

- 1. Positive drainage shall be provided for all portions of the finished roof surface to the edge of the roof or to roof drains.
- 2. Roofs shall be maintained so that water does not pond.
- 3. Accessories such as flashing, gravel stops, drip edging, expansion joints, gutters, downspouts, scuppers, and roof drains, where provided, shall be maintained in a good condition.
- 4. Structural members, including decks, beams, fascia, etc., shall be in good repair and structurally sound.

#### (8) Doors and Windows.

Doors and windows (including those for relocatables) shall meet the following minimum casualty safety and sanitation requirements, etc., as applicable:

Doors and windows in a means of egress shall meet the specific requirements of Rule 69A-58, FAC, for fire safety.

State Fire Marshal Rule 69A-58.005(2)(a), FAC, lists the "Serious Life Safety Hazards" for doors and windows, which includes the use of padlocks or other unapproved locks, inadequate exits, and storage conditions. In addition, Section 69A-58.005(2)(b), FAC, states that other conditions may be identified to the division by the school board or local fire official for designation as a serious life safety hazard including, but not limited to, a door required to be self-closing, being held open with a doorstop, wedge, or other device or object.

See State Fire Marshal Rule 69A-58.0081, FAC, "Means of Egress," for further information and requirements.

#### (a) Doors and Windows.

Doors and windows shall be maintained in an operable, safe and secure condition at all times and be free of splinters, sharp projections, broken glass, broken hardware, etc. Glass in doors and windows shall meet applicable glazing requirements found in Section 5(8)(d).

Safety glazing must meet CPSC 16 CFR 1201 requirements. Replacement glazing in existing Educational facilities shall meet the code requirements for new construction as set forth in the Florida Building Code, Building.

Windows facing parking lots, building entrances, assembly points, auditoriums, and interior spaces (such as corridors, labs, and music rooms) should not be obscured by architectural elements, furnishings, mechanical or electrical fixtures, decorations, posters, signs, banners or other materials that obstruct the passage of light or the ability to view in.

#### (b) Doors.

Doors shall be positioned so that there is clear floor space on the pull side of the door adjacent to the latch and so that the floor on both the interior and exterior sides of a door is substantially level.

See NFPA 101 Section 15.2.2.2 "Doors" for further information and requirements.

(See Appendix, Doors and Windows.)

- 1. Doors opening into interior corridors shall be either:
  - a. Recessed and hinged to swing 90 degrees; or
  - b. Not recessed and hinged to swing 180 degrees.
- 2. Storefront Doors.

Glazing in storefront doors shall contain a built-in horizontal safety guard located between 24 and 36 inches above finished floor.

#### (c) Hardware.

1. Locksets.

All doors shall be equipped with locksets that are not lockable from inside the space.

**Exception:** Individual toilet rooms may be locked from the inside, and may be equipped with privacy locks that are readily opened from the inside and that may be opened from the outside without a special tool.

**Exception:** The classroom security function, which allows the outside lever to be locked with a key from either the inside or outside while keeping the inside lever unlocked for unrestricted egress, may be used.

Utilizing wall stops can help prevent doors from damaging walls.

(See NFPA 101, Chapter 15, Section 15.2.2.2 for further information and requirements.)

(See Appendix, Acceptable Lockset Functions and Hardware.)

2. Door Closers.

- a. Doors subject to wind exposure shall be equipped with closers.
- b. Where door closers are used, the sweep period shall be adjusted so that from an open position of 70 degrees, the door takes at least three seconds to move to a point three inches (76 mm) from the latch, measured to the leading edge of the door.
- c. Doors requiring closers shall be equipped with operable closers to prevent slamming and shall have back-check devices to prevent uncontrolled openings. Doors subject to wind exposure shall be equipped with a door-check or other suitable device to prevent slamming and uncontrolled openings.

All exterior entry doors must be equipped with door closers. Door closers are also recommended on exterior doors for mechanical, electrical, and boiler rooms.

Door propping, which allows students to leave or enter school during class hours unnoticed, can be a significant problem. It also allows unwanted visitors access to the school. Where feasible, doors should be equipped with electronic monitoring systems connected to appropriate central administrative offices.

#### 3. Manual Hold-Open Devices.

Manual hold-open devices shall be used only on exterior doors and in non-fire-resistancerated or smoketight wall assemblies.

Magnetic hold-opens are not permitted on any door in a fire-rated wall or smoke-tight corridor unless they are controlled by an alarm system.

#### 4. Accessible Hardware.

In accordance with Chapter 11, 2007 Florida Building Code, Building, or the 2012 Florida Accessibility Code for Building Construction, Rule 61G20-4.002, FAC, accessible door hardware, where installed, shall be of a shape that is easy to grasp with one hand and can be opened without twisting the wrist. Lever operated, push-type, and "U" shaped hardware handles are acceptable designs.

(See Appendix, Door Hardware.)

#### 5. Thresholds.

All thresholds shall be secure, watertight, and free of sharp edges and tripping hazards. Exterior door thresholds shall be one-half inch or less in height.

#### (d) Glazing.

Glazing shall be secured on all sides, free of any loose or broken pieces, in good repair, and comply with the following:

(See Appendix, Door Fire-Rating Labels.)

#### 1. Hazardous Locations.

Glazing subject to human impact or in hazardous locations shall be safety plastic, tempered glass, or safety glass. Glazing subject to human impact or in hazardous locations in firerated assemblies, impact-resistant, fire-rated glazing material shall be used. The following

are specific hazardous locations for the purpose of glazing:

Other potentially hazardous locations for glazing subject to human impact include weight rooms, dance rooms, toilet rooms, and corridors.

Safety glazing is required to meet CPSC 16 CFR 1201 requirements. Replacement glazing in existing Educational facilities shall meet the code requirements for new construction as set forth in the Florida Building Code, Building.

(See Appendix, Safety and Fire-Rated Glazing.)

- a. Doors, whether swinging, sliding, rolling, etc. Exception: Solid-core doors in one-half-hour-rated corridor partitions and smoke doors shall have wire glass or fire-rated glazing.
- b. Glazed panels, within 48 inches of a door, where the bottom edge of the panel is below the top edge of the door.
- c. Glazed panels beginning 18 inches or less from the floor, where the panel is greater than nine square feet in area, and there is a walking surface within 36 inches of the panel.
- d. Display and trophy cabinets and casework.
- e. Mirrors.

Mirrors, located in dance studios, labs, and weight rooms, may also be stainless steel.

- f. Enclosures for whirlpools, saunas, steam rooms, and showers.
- 2. Glazed panels shall be subdivided by built-in vertical and horizontal members and contain a built-in horizontal guard between 24 and 36 inches above finished floor.

(See Appendix, Safety and Fire-Rated Glazing.)

- 3. Other interior glazing, such as glass block, glass railings, sloped glass, and float glass, where provided, shall be secure, free of sharp or broken pieces, and maintained in a safe condition.
- 4. Areas of exterior glazing shall be maintained in a safe and secure manner and free of loose or broken pieces.

#### (e) Windows.

Windows, when provided for natural light, ventilation, and access panels, shall be maintained in an operable, safe, and secure condition, and shall be free of any loose or broken pieces.

According to State Fire Marshal Rule, 69A-58.0081(9)(a) and (b), FAC, in existing non-sprinklered buildings, every instructional space, and other spaces normally subject to student occupancy of 10 or more, shall have at least one window, panel, or door leading to the exterior or to a separate atmosphere. For buildings designed after October 18, 1994, the emergency rescue (escape) opening shall be provided in rooms greater than 250 square feet used for

classroom or other educational purposes or normally subject to student occupancy of six or more.

See State Fire Marshal Rule 69A-58.0081, FAC, "Means of Egress," for additional requirements and exceptions.

(See Appendix, Emergency Rescue Openings.)

- 1. Projecting and awning windows with sharp or protruding corners, below door head height, if in or adjacent to a corridor or walkway, shall be rendered safe and secure.
- 2. Sources of natural light in instructional spaces shall be glazed with glare-reducing materials, or shall be shielded to prevent glare from interfering with seeing tasks within the space.

#### (9) Finishes.

Finishes shall meet the following minimum casualty safety and sanitation requirements for interior and exterior wall, ceiling, and floor finish materials, etc., including those for relocatables, as applicable. (Finish materials shall be permanently affixed to an educational and ancillary facility and include interior movable walls and partitions.).

#### (a) Interior Finish General Requirements.

Interior finishes shall be maintained in a satisfactory condition at all times and shall be free of hazards. Educational and ancillary facilities shall be free of any interior finish material shown by test or known to present a safety or health hazard due to its flammability or the character of the products of decomposition.

Columns supporting roofs and covered walkways should be maintained with climb-resistant paint or finishes. (See also 14(a) "Relocatables" below.)

- 1. Wall or ceiling finishes shall be free of textile materials, including carpet, having a napped, tufted, looped, woven, nonwoven, or similar surface.
- 2. Interior finishes, including interior plywood paneling, which have a higher flame-spread rating than permitted, must be rendered safe by the application of a fire-retardant paint, coating, or penetrant.

In existing educational facilities, replacement finishes must be in accordance with the Florida Building Code and the Florida Fire Prevention Code.

According to NFPA 101 Section 15.3.3 as regulated by Section 10.2, materials applied directly to the walls and ceilings in total thickness less than 1/28 inches shall not be considered interior finish, and approved existing installations of materials applied directly to walls and ceilings with a total thickness less than 1/28 inches shall be permitted to remain in use. Decorations and furnishings that do not meet the definition of interior finishes as per Section 10.2 shall be regulated by the provisions of NFPA 101 Section 15.7.4, "Furnishing and Decoration." See also SREF Chapter 5 (12) "Furnishings."

The use of textile materials meeting the requirements of Class A on walls and ceilings shall be permitted if in compliance with one of the following as per NFPA 101 Section

15.3.3, "Interior Finish," and regulated by NFPA 101 Section 10.2, "Interior Finish":

Installed on the walls and ceilings of rooms or areas protected by an approved automatic sprinkler system.

Located on partitions that do not exceed a maximum of three-quarters of the floor-to-ceiling height or do not exceed 8 feet in height, whichever is less.

Textiles do not extend more than 48 inches above finished floor on ceiling height walls and ceiling height partitions.

Are previously approved installations.

Installed on walls and partitions where tested in accordance with NFPA 265, "Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings or Expanded Vinyl Wall Coverings on Full Height Panels and Walls."

Installed on walls, partitions and ceilings where tested in accordance with NFPA 286, "Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution Wall and Ceiling Interior Finish to Room Fire Growth."

Interior wall, ceiling trim and incidental finish not in excess of 10% of the aggregate wall and ceiling area of any room or space shall be permitted to be Class C materials in occupancies where interior wall and ceiling finish of Class A or Class B is required (NFPA 101 15.3.3).

Bulletin boards, posters and paper attached directly to the wall shall not exceed 20% of the aggregate wall area to which they are applied, in an unsprinklered building, and shall not exceed 50% if located in a building that is protected throughout with an approved automatic sprinkler system in accordance with NFPA 101 Section 9.7 (NFPA 101 Chapter 15.7.4).

(See Appendix, Finishes.)

#### (b) Ceilings.

The minimum ceiling height shall be such that ceiling fans, light fixtures, HVAC equipment, fire system, and lifesafety equipment will not endanger, or be disabled by, the occupants.

In spaces where drop (suspended) ceilings are permitted, the installment of splines is recommended to provide a secure framework so that illicit or stolen items cannot be easily concealed within the plenum spaces.

1. Ceilings in group toilet rooms, kitchens, sculleries, can-wash areas, showers, and locker rooms shall be impervious.

Examples of impervious materials for floors are ceramic tile, quarry tile, and quartz two-part epoxy (at least 1/16 inch thick). Examples of impervious materials for walls are ceramic tile, "Marlite" board, and two-part epoxy. Joints must be sealed to prevent unsanitary conditions.

2. Ceiling finish shall be free of any carpet.

#### (c) Walls.

Toilet partitions and toilet room walls, shower partitions and shower room walls, and kitchen, food preparation, scullery, and can-wash room walls shall be finished with dense, nonabsorbent, and noncorrosive materials having a smooth, impervious surface. Impervious finishes shall extend a minimum of four feet above the floor in toilet rooms and six feet above the floor in kitchens, sculleries, can-wash areas, and shower rooms.

The base of an impervious finished wall must maintain the impervious finish between the wall and the floor. An applied rubber base is not an impervious finish.

# (d) Floors.

Floor finish materials shall be permanently affixed to an educational or ancillary facility and comply with the following:

- 1. All interior floors shall be nonslip and exposed concrete floors shall be sealed against dusting.
- 2. Interior floors shall have surfaces that are even and substantially level.
- 3. Interior and exterior means of egress shall have floor surfaces that are even, substantially level, and free from irregularities, except for tactile warnings.
- 4. Floors in toilet rooms, locker rooms, shower rooms, drying areas, kitchens, food preparation areas, scullery areas, can-wash areas, and other floors that could become slippery when wet shall have a nonslip, impervious surface.

The base of an impervious finished wall must maintain the impervious finish between the wall and the floor. An applied rubber base is not an impervious finish.

- 5. Individual toilet room floors and base shall be nonslip and impervious.
- 6. Art rooms, vocational shops, industrial arts shops, gymnasium exercise rooms, areas under fixed seating in auditoriums, mechanical rooms, storage rooms, and ancillary facilities where activities involved make the use of other floor materials impractical, shall have integrally hardened and sealed concrete floors.
- 7. Ramp and stair walking surfaces shall be slip resistant.
- 8. Clinics and food service areas shall have floor finishes that can be cleaned daily with a germicidal detergent. (Note: Food service area floors do not require cleaning with a tuberculocidal disinfectant.)

(See Appendix, Finishes.)

### (e) Acoustics.

Each interior instructional space shall be acoustically treated to control reverberation, echo, and excessive deadness.

## (10) Specialties.

Specialties shall meet the following minimum casualty safety and sanitation requirements for special safety requirements, fixed instructional aids, informational aids, etc., including those for relocatables, as applicable:

## (a) General Safety Requirements.

Existing facilities shall comply with the special safety provisions, means of egress, separation of spaces, and other requirements found herein.

- 1. Platforms, corridors, floors, and loading docks 18 inches or more above the ground, and designated machinery shall have bright yellow safety lines, four inches wide, painted on the exposed edge or floor.
- 2. Stairs and balconies serving as a means of egress and connecting buildings shall be roofed.
- 3. Exterior (open) corridors or balconies of 18 inches or more above grade serving as a required means of egress shall be open to the outside air and shall be enclosed only by a guardrail or balustrade. Balconies shall have guardrails or balustrades as follows:
  - a. A minimum of 42 inches high with balusters spaced not more than four inches apart.
  - b. A bottom rail shall be spaced not more than two inches above finished floor.
  - c. Exception: In facilities designed prior to October 18, 1994, the maximum spacing of balusters may be six inches apart.

(See Appendix, Handrail at Stairs.)

4. The space under stairs and ramps shall be kept free of any storage or other purpose.

Spaces under stairs should be blocked off to remove hiding niches and entrapment zones.

(See Appendix, Stairs.)

- 5. The maximum difference in floor elevation at doorways in a path of travel shall be one-half inch.
- 6. All exit ramps shall be at least 44 inches wide and the surface finish of ramps shall be nonslip.
- 7. Differences in floor elevations that require fewer than three risers shall be ramped.

Ramps shall be in accordance with Section 15.2.2.6, NFPA 101, FFPC. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 inches.

Curb ramps and interior or exterior ramps to be constructed on existing sites or in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope or less may have slopes and rises as follows (see Florida Building Code, Accessibility, Chapter 4 Section 405):

(a) A slope between 1:10 and 1:12 is allowed for a maximum rise of 6 inches (152 mm).

(b) A slope between 1:8 and 1:10 is allowed for a maximum rise of 3 inches (76 mm).

A slope steeper than 1:8 is not allowed.

(See Appendix, Stairs.)

- 8. Handrails shall be maintained in a safe and secure condition at all times and shall be capable of supporting a human impact applied at any point and in any direction.
- 9. Stair treads and landings shall be free of projections that would present a tripping hazard.
- 10. Interior stairs, exterior stairs, and smokeproof towers shall:
  - a. Be maintained in a safe and secure condition at all times.
  - b. Be free of any loose or broken treads or risers.

## (b) Potential Hazards.

Uninsulated heating pipes, window projections, protruding sharp corners, audio-visual aids, or other potential hazards shall be at least six feet, eight inches above finished floor, or shall be rendered safe by padding, signage, limited access, or other means..

Piping of any kind should not be installed below 6 feet, 8 inches.

### (c) Separation of Spaces.

Hazardous areas such as boiler rooms and kitchens shall be maintained in the original firetight and smoketight condition.

**Exception:** One-hour separation at a kitchen is not required where an approved NFPA 96 Hood suppression system is in place.

### (d) Marker Boards and Tackboards.

Marker boards or chalkboards, tackboards, map rails, and trays shall be provided in instructional spaces. Where provided, they shall be maintained in a safe, secure, and usable condition.

Bulletin boards, posters and paper attached directly to the wall shall not exceed 20% of the aggregate wall area to which they are applied in an unsprinklered building and shall not exceed 50% if located in a building that is protected throughout with an approved automatic sprinkler system in accordance with NFPA 101 Section 9.7 (NFPA 101 Chapter 15.7.4).

See SREF Chapter 5 (9)(a), "Interior Finish," and Section (12) "Furnishings," for further information.

(See Appendix, Finishes.)

## (e) Toilet Partitions.

Toilet compartments, partitions, and doors shall be provided in group toilet rooms and may be provided in other areas, such as locker rooms, and shall be finished with noncorrosive, impervious materials. Toilet compartments shall be provided with a door and privacy latch.

Each toilet stall shall have a door that may be latched from the inside. Doors for accessible toilet stalls shall be at least 32 inches wide and shall swing out.

## (f) Toilet and Bath Accessories.

Toilet and bath accessories, including grab bars; toilet paper dispensers; paper towel dispensers or hot-air drying devices; soap dispensers for liquid, foam, or powdered soap; napkin disposal units; shelving, and mirrors, where provided, shall be maintained in a safe and secure condition at all times. The use of common or public towels shall not be permitted.

Toilet access and egress should be designed using an entry system that maximizes auditory surveillance from adjacent hallways and rooms.

(See Appendix, Group Toilets.)

## (g) Diaper Changing Stations.

Diaper changing stations, where provided, shall comply with thefollowing:

- 1. Diaper changing stations shall be equipped with an impermeable changing mat that is cleaned and sanitized after each use.
- 2. Diaper changing tables shall be maintained in a safe and secure condition at all times.
- 3. Repairs to impermeable changing mats shall not be made with tape.
- 4. A sanitizer that is approved by the EPA shall be available at the changing station. The sanitizer shall be prepared according to the manufacturer's instructions and used as directed on the label. The sanitizer shall be limited to a one-day's supply and shall not be accessible to students.
- 5. A garbage can equipped with a tight-fitting lid and lined with an impermeable garbage bag shall be located at the diaper changing station. The garbage can shall be cleaned and sanitized at least daily.

### (h) Pest Control.

Pest control and termite protection of buildings and grounds shall be provided in accordance with Florida Department of Agriculture and Consumer Services regulations and certificates shall be on file and available for inspection. Pest means any vector, vermin, insect, rodent, nematode, form of terrestrial or aquatic animal life, or organism that is a nuisance to man because it has pathogenic properties.

#### (i) Interior Signage.

Interior signage and graphics shall comply with the following (exterior signage shall comply with requirements found elsewhere in SREF, Chapter 5):

- 1. Permanent and temporary interior signage shall be uniform in color, height, size, and graphics.
- 2. Interior signage shall include the following:
  - a. Room numbers and names shall be provided for each space.

b. Signs shall indicate accessible routes, entrances, and rooms within a building.

Signs indicating evacuation routes must be clear and shall be revised when conditions for exiting change due to remodeling and/or additions.

Primary and secondary routes should be clearly indicated on egress signs. Whenever possible, maps should be oriented according to viewer.

- Hazardous work and storage areas shall be identified by appropriate caution signs.
- 4. Means of egress, capacity, accessibility, directional and exit information, FISH numbers and room names, and evacuation routes shall be identified with appropriate signage.

(See Appendix, Signage.)

5. In educational facilities that house grades pre-K through 12, auxiliary facilities, Florida colleges, vocational centers, ancillary facilities, and other facilities primarily used by adults, signage shall be mounted at 60 inches above finished floor on the latch side of doors and contain raised and Braille characters and the international accessibility symbol.

Letter heights must be a minimum of 3 inches in building interiors, taking adequate lighting and contrast into account.

(See Appendix, Signage.)

- 6. Internal illumination of signs, where provided, shall be maintained.
- 7. Wall-mounted signs and graphics shall be attached to the building in such a way as to discourage vandalism.

See State Fire Marshal Rule 69A-58.0081(11), FAC, "Specialties and Signage," for further information and requirements.

## (i) Demountable Partitions.

Demountable partitions and other wall systems designed to be disassembled, moved, and reassembled, where provided, shall be maintained in a safe and secure condition at all times.

## (k) Automated External Defibrillator.

Pursuant to Section 1006.165, F.S., automated external defibrillators shall be provided in schools that are members of the Florida High School Athletic Association. Where provided, they shall be maintained in a safe, secure, and usable condition..

### (11) Equipment.

Equipment shall meet the following minimum casualty safety and sanitation requirements for instructional, health, sanitation, safety, recreational, and operational features, etc., including those for relocatables, as applicable:

# (a) Fire Blankets.

Fire blankets shall be provided as follows:

- 1. Fire blankets shall be readily visible and shall be placed in locations that are readily accessible and suitable for the hazard present.
- 2. Fire blankets shall be on shelves or in cabinets so that the top of the fire blanket is five feet or less above finished floor.
- 3. Fire blankets shall be located in each laboratory and each shop where a personal fire hazard may exist.

(See Appendix, Equipment.)

## (b) Vault Doors and Security Systems.

Where a vault or security system is provided, vault doors and facility exit doors shall be operable from the inside at all times without the use of special keys, tools, or equipment.

## (c) Waste Compactors and Destructors.

Waste compactors and destructors at educational facilities shall be accessible for maintenance and sanitation and fenced or otherwise made inaccessible to students.

## (d) Waste Chutes and Collectors.

Waste chutes and collectors, including dumpsters, shall be accessible for maintenance and sanitation and fenced or otherwise made inaccessible to students. Collectors and dumpsters shall be located on a concrete slab. Wet garbage shall be stored in impermeable, leak-proof, fly-tight containers pending disposal.

## (e) Residential Appliances.

Residential-type appliances, such as stoves, hoods, refrigerators, washers, dryers, ovens, and unit kitchens when used in classrooms, laboratories, lounges, or shops, shall be maintained in a safe and secure condition at all times.

Residential-type ranges installed in home economics instructional spaces, classrooms, faculty lounges, and similar areas shall not be required to comply with the provisions for commercial cooking appliances under NFPA 96, provided all of the following requirements are met:

- (a) The space contains only residential-type ranges with hoods vented to the outside.
- (b) Fire extinguishers are installed in accordance with NFPA 10.
- (c) The space containing the residential-type range is not classified as an assembly.

(See Appendix, Equipment.)

### (f) Built-In Cabinets and Casework.

Cabinets and casework, such as in kitchens, toilet areas, classrooms, etc., shall be accessible, free of hazards, and maintained in a safe and secure condition at all times.

Built-in cabinets and casework within a path of egress must not decrease the required egress width and must be made of Class A-rated materials and impact-resistant glazing, unless

protected throughout by an approved automatic sprinkler system in accordance with NFPA 101 Section 9.7.

(See Appendix, Safety and Fire-Rated Glazing.)

## (g) Athletic and Recreational Equipment.

Athletic and recreational equipment, where provided, shall be kept clean and in a safe condition.

## (h) Shooting Range.

Shooting range equipment, where provided, shall be maintained in conformance with manufacturer's specifications to minimize hazards to occupants and users. Indoor shooting ranges shall have fresh air intake and positive exhaust of noxious fumes to the outside.

### (i) First Aid Kit.

First aid kits shall be fully equipped per Board policy and shall be available for student use under adult supervision.

In accordance with NFPA 101 Chapter 15.3.2.4, alcohol-based hand rub dispensers shall be protected in accordance with NFPA 101 Chapter 8.7.3 "Flammable Liquids and Gases," unless all of the following conditions are met:

- (a) Dispensers shall be installed in rooms and areas separated from corridors and exits; and
- (b) The maximum dispenser fluid capacity shall be as follows:
  - i. 0.32 gal for dispensers in rooms; and
  - ii. 0.53 gal for dispensers in suites of rooms; and
- (c) The dispensers shall be separated from each other by horizontal spacing no less than 48 inches; and
- (d) Storage of quantities greater than 50 gal in a single fire compartment shall meet the requirements of NFPA 30 "Flammable and Combustible Liquids Code;" and
- (e) The Dispensers shall not be installed over or directly adjacent to an ignition source; and
- (f) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered rooms or spaces.

## (12) Furnishings.

Furnishings shall meet the following minimum casualty safety and sanitation requirements for furnishings, decorations, etc., including those for relocatables, as applicable:

## (a) Hazardous Materials.

Educational and ancillary plants shall be free of furnishings and decorations made of explosive, highly flammable, or toxic materials.

In accordance with NFPA 101 Chapter 15.7.4 "Furnishings and Decorations" as regulated by NFPA 101, Chapter 10.3.1:

Clothing or personal effects shall not be stored in corridors unless the corridor is protected by an approved automatic sprinkler system, protected by an approved smoke detection system, or if stored in metal lockers provided that the required egress width is maintained. (See NFPA 101 Chapter 15.7.4.2.)

Artwork and teaching materials shall be permitted to be attached directly to the walls if the artwork and teaching materials shall not exceed 20% of the wall area in a building that is not protected throughout by an approved automatic sprinkler system; and artwork and teaching materials shall be permitted to be attached directly to the walls if the artwork and teaching materials do not exceed 50% of the wall area in a building that is protected throughout with an approved automatic sprinkler system in accordance with NFPA 101 Chapter 9.7. (See NFPA 101 Chapter 15.7.4.3.)

Draperies, curtains, and other similar loosely hanging furnishings and decorations shall meet the flame propagation performance criteria contained in NFPA 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films." (See NFPA 101 Chapter 15.7.4.1.)

(See Appendix, Finishes.)

## (b) Freestanding Manufactured and Custom Casework.

Manufactured and custom casework, such as in classrooms, media centers, and other areas, shall be accessible, free of hazards, and maintained in a safe and secure condition at all times.

## (c) Plastic Laminate.

Plastic laminate where used on casework shall be free of any hazard such as loose, broken, or jagged pieces.

## (d) Window Coverings.

Interior blinds, shades, and shutters, where provided, shall be:

- 1. Capable of darkening the room sufficiently to allow audio-visual presentations.
- 2. Maintained free of torn material, broken slats, pulleys, and cords, and in an operational and safe condition at all times.

Draperies, curtains, and other similar loosely hanging furnishings and decorations shall meet the flame propagation performance criteria contained in NFPA 701, "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films." (See NFPA Chapter 15.7.4.1.)

Draperies, curtains, and other similar loosely hanging furnishings and decorations must not block any egress signage.

(See Appendix, Finishes.)

#### (e) Floor Mats and Grates.

- 1. Floor mats and grates, where used, shall be flush with, or secured to, the surrounding floor surface.
- 2. Mats and grates used around pools and shower rooms shall be free of any hazard to

bare feet.

## (f) Auditorium and Theater Seating.

Auditorium and theater fixed and movable seats shall be accessible, maintained in a safe and operational condition at all times, and free of any torn or loose materials or fittings that pose a hazard to users.

(See Appendix, Auditorium Aisle Widths and Appendix, Auditorium Seating.)

## (g) Built-in Tables and Fixed Seating.

Built-in tables and fixed seating, where provided, shall be accessible, maintained in a safe and operational condition at all times, and free of any torn or loose materials or fittings that pose a hazard to users.

## (h) Furnishings and Equipment.

Furnishings and equipment shall be kept clean and in good repair and free of missing parts and hazards.

## (13) Special Construction.

The spaces and facilities listed in this section shall meet the following minimum casualty safety and sanitation requirements for special construction, including relocatables, as applicable:

### (a) Accessibility Requirements.

Accessibility for children and adults with disabilities shall comply with the applicable state and federal standards governing accessibility requirements. (For the purpose of SREF, "children" are defined as students in grades pre-K through grade five or grade six, depending on the structure of the elementary schools and middle or junior high schools in the district as applicable. "Adults" are defined as students in grade six or grade seven through grade 12, faculty, staff, parents, and the general public using any public educational facility. Students housed in vocational/technical centers, and Florida colleges are also defined as "adults.")

### (b) Ancillary Facilities.

Casualty safety and sanitation safety inspections of ancillary facilities shall comply with other portions of this section and the following occupancy classifications shall apply:

- 1. Assembly Occupancy means district meeting rooms, conference rooms, dining rooms, multipurpose rooms, gymnasiums, and auditoriums.
- 2. Business Occupancy means district administration buildings, including offices, data processing centers, kitchens, and media centers.
- 3. Storage Occupancy means district warehouse and maintenance facilities, repair shops, bus garages, parking structures, and parking lots.

### (c) Assembly Occupancies (within Educational Facilities).

Inspection of assembly occupancies shall include the adjacent and related spaces associated with the main seating area such as stages, dressing rooms, storage, lobby, public restrooms, kitchens, and work rooms. (Assembly occupancies are buildings, portions of buildings, or spaces used for gatherings of 50 or more persons, such as auditoriums, gymnasiums, multipurpose rooms, classrooms and laboratories, cafeteria, stadiums, media centers, and

interior courtyards).

Assembly occupancies are buildings, portions of buildings, or spaces designed for occupancy of 50 or more persons.

(See Appendix, Auditorium Aisle Widths and Appendix, Auditorium Seating.)

- 1. Special acoustics, listening devices, and accommodations for physically disabled and hearing impaired individuals shall be provided in auditoriums and other assembly occupancies in compliance with state and federal accessibility requirements.
- 2. Space for wheel chairs shall be provided in assembly areas where fixed seating is provided.
- 3. Clear access for wheelchairs shall be provided behind the table and the next adjacent table or wall in areas that include fixed tables.
- 4. Fixed seats shall be maintained in a secure and safe condition at all times and be free of any hazard such as loose or torn materials or fittings.

## (d) Auxiliary Spaces.

Auxiliary spaces within an educational plant, such as administrative suites, libraries, and food service areas, are considered as educational occupancies and shall be included in the annual firesafety, casualty safety, and sanitation inspections of existing facilities and shall comply with the provisions found elsewhere in SREF.

### (e) Boiler Rooms.

Boiler rooms shall be free of any equipment or materials not required for operation of the boiler.

Boiler rooms must be free of any materials not required for operation of the boiler.

See State Fire Marshal Rule 69A-58.0081(17) for fire safety requirements for fuel-fired equipment.

### (f) Child-Care/Day-Care Facilities.

Child-care/day-care facilities located on Board-owned property shall comply with the requirements found elsewhere in this section and the following specific requirements:

- 1. Facilities shall include an accessible toilet room for children opening directly into the instructional space. (The toilet area may be used by both sexes and shall contain a water closet, lavatory, and related accessories.)
- 2. Where hot water is provided at a child's hand-washing sink, a mixing valve shall be provided that limits water temperature to a maximum of 110 degrees Fahrenheit. A towel dispenser and a soap dispenser shall be provided at each sink. Adult hand-wash areas shall be permitted to be provided with hot and cold water.
- 3. Where child-care facilities are provided with a bathing area, it shall be located within or adjacent to the child-care area and shall contain either a shower with handheld sprayer

or a tub. The water temperature shall be controlled by a mixing valve that limits water temperature to a maximum of 110 degrees Fahrenheit.

- 4. Toilet facilities shall have a nonslip, impervious floor, impervious base, and minimum fourfoot-high impervious wainscot.
- 5. Facilities shall provide at least one drinking fountain, which shall be within close proximity of the child-care facility.
- 6. Where a residential-type kitchen is provided, it shall include a nonslip floor, refrigerator, and a residential-type range with a residential-type range-hood vented to the outside.
- 7. Facilities shall be free of any storage of cleaning agents, chemicals, or other hazardous materials. Powdered or liquid hand soap is permitted at lavatories and sinks. A one-day's supply of sanitizer that is out of reach of children is permitted at diaper changing stations.
- 8. Facilities shall provide outdoor play areas which are protected from access to streets or other dangers by fencing that meets the requirements of SREF, Section 5(2)(d). Any latches on gates shall be secured or beyond the reach of the children.
- 9. Facilities shall provide shade in the outdoor play area.
- 10. Facilities shall ensure that play equipment and playground surface material meet the requirements of SREF, Section 5(2)(k).
- 11. Facilities shall ensure the grounds are free of undergrowth or harmful plant material.
- 12. **Exception:** Child-care/day-care facilities requiring a Department of Health or Department of Children and Families license may also be required to comply with the Florida Building Code and other agency construction requirements. If there is a conflict between SREF, the Florida Building Code, and other agency requirements, the most stringent requirement shall prevail.

## (g) Clinics (School).

The school clinic shall include a reception area/office, storage, toilet room, and bed space.

- 1. Sanitary facilities shall be provided as follows:
  - a. Elementary school clinics, including pre-K, shall have one accessible toilet room, to serve male and female students, complete with a water closet, lavatory, and accessories.
  - b. Secondary schools shall include one accessible toilet room for males complete with water closet, lavatory, and accessories, and one accessible toilet room for females complete with water closet, lavatory, and accessories.
  - c. Toilet rooms in clinics shall include both hot and cold water at the lavatory and shower, if provided. Hot water temperature shall not exceed 110 degrees Fahrenheit.
  - d. Toilet rooms shall have exhaust fans vented to the exterior.

2. Space for student beds shall be provided in each clinic. Space for beds in secondary schools shall be separated for male and female students.

In existing educational facilities, if the required separation for male and female students in clinics is by movable partitions and/or curtains, the movable partitions and/or curtains shall be made of Class A-rated materials unless located in a building that is protected throughout with an approved automatic sprinkler system in accordance with NFPA 101 Section 9.7. (See NFPA 101 Chapter 15.7.4.)

- a. A cleanable, plastic-covered mattress and pillow shall be provided for each bed.
- b. Clean, disposable mats shall be provided for each patient.
- 3. The reception area/office shall provide the ability to maintain visual supervision of the bed area.

## (h) Clinics (Full-Service School Program).

Full-service school clinics shall include one accessible toilet room for males complete with water closet, lavatory, and accessories, and one accessible toilet room for females complete with water closet, lavatory, and accessories. One accessible toilet room shall have an accessible shower.

- 1. Hot and cold water shall be provided in toilet rooms at the lavatory and shower. Hot water temperature shall not exceed 110 degrees Fahrenheit.
- 2. Toilet rooms shall have exhaust fans vented to the exterior.
- 3. The nurse's station shall provide the ability to maintain visual supervision of the bed areas.
- 4. Lockable storage rooms shall be provided for a refrigerator, files, equipment, and supplies. Storage room doors shall be readily operable from the inside.
- 5. Data outlets shall be provided for computer hookups and computer networking and additional electric outlets shall be provided for hearing and vision testing machines.
- 6. The clinic shall be located to provide direct access from the exterior and shall also have direct access from the interior or be connected by a covered walk.
- 7. The clinic shall be provided with designated parking spaces immediately adjacent to the clinic, one of which shall be accessible to persons with disabilities.

## (i) Clinics (Florida Colleges).

Where Florida college clinics are provided, the following requirements shall apply:

1. Clinics shall include one accessible toilet room for males complete with water closet, lavatory, and accessories, and one accessible toilet room for females complete with water closet, lavatory, and accessories.

- 2. Hot and cold water shall be provided at lavatories in toilet rooms and at optional shower. Hot water shall not exceed 110 degrees Fahrenheit.
- 3. Toilet rooms shall have exhaust fans vented to the exterior.
- 4. Florida college clinics shall provide bed(s) for female students and bed(s) for male students.
  - a. A cleanable, plastic-covered mattress and pillow shall be provided for each bed.
  - b. Clean, disposable mats shall be provided for each patient.

## (i) Florida colleges.

Florida college facilities and buildings shall comply with the general requirements found elsewhere in SREF and the business occupancy requirements found in the Florida Fire Prevention Code.

### (k) Dormitories.

Dormitories shall be maintained in good and clean condition. They shall be free from pest infestations, noisome odors, and health and safety hazards.

### (I) Energy Conservation.

Solar water heating systems, passive natural ventilation, and other energy conservation measures, where provided, shall be in good repair and functioning as intended.

## (m) Incinerators.

Incinerators, where provided, shall be maintained in a safe and secure condition at all times.

## (n) Stadiums, Grandstands, and Bleachers.

- 1. Structural members for stadiums and bleachers, including seats and related facilities, shall be maintained in a safe condition and shall be free from hazards, including cracks, spalling, exposed reinforcing steel, rust, and loose fastenings.
- 2. Inspections.
  - a. Annual inspections shall be performed by Board staff and a certificate of inspection shall be kept on file in the district office.
  - b. Biennial inspections shall be performed by a structural engineer for all concrete, structural members, stadiums and bleachers, and a certificate of inspection shall be kept on file in the district office.
  - c. Certificates of inspection shall be made available to the fire official upon request.
- 3. Railings at least 42 inches high shall be provided at the top and sides of bleachers and grandstands.

Railings or guards no less than 42 inches above the aisle surface or foot rest or no less than 36 inches above the center of the seat or seat board surface, whichever is adjacent, shall be provided along those portions of backs and ends of all grandstands where the seats are in excess of 48 inches above the floor or finished ground level except where an

adjacent wall or fence affords an equivalent safeguard. (See NFPA 101 Chapter 13.4.8.6.) Portable grandstands and bleachers shall conform to all code requirements for grandstands as per NFPA 101 Chapter 13.4.8 and NFPA 101 Chapter 13.2.5.6.

See also NFPA 1 "Grandstands and Bleachers, Folding and Telescopic Seating, Tents and Membrane Structures," Chapter 25.1.1.

Access to undersides of bleachers should be restricted to prevent hiding and entrapment zones.

(See Appendix, Grandstands and Bleachers.)

### (o) Kilns.

- 1. Kiln rooms and kiln areas shall be provided with adequate exhaust to dispel emitted heat to the exterior.
- 2. Kiln rooms shall not be used for storage.
- 3. Kilns shall be located in separate rooms when serving students through grade 3.

Kilns brought into an existing facility shall meet all code requirements for new construction. Kiln rooms and areas shall be provided with adequate exhaust to dispel emitted heat to the exterior. Kiln exhaust systems should be independent of any other exhaust system and shall not be connected to an energy management system, programmable time clock, setback thermostat, heat-recovery equipment, or equivalent. Kilns shall not be located near or adjacent to paths of egress or exit and shall be placed in separate rooms when serving students through grade 3. Kiln rooms shall be provided with automatic heat or smoke detection devices appropriate for the environment.

See Florida Building Code, Building, 423.23 "Kilns" and State Fire Marshal Rule 69A-58.0081, FAC, Section 16 "Kilns."

See also NFPA 86 "Standard for Ovens and Furnaces" for further information regarding the installation and operation of kilns. This standard applies to new installations or to alterations or extensions to existing equipment.

Kiln rooms should be secured against illicit entry and use.

# (p) Kitchen and Food Service Facilities.

Pursuant to Section 381.0072, F.S., food service facilities and instructional kitchens are required to be in compliance with DOH Rules in Chapter 64E-11, FAC. In addition, they shall comply with the general requirements found elsewhere in this section and the following:

(See Appendix, Kitchen and Food Service.)

- 1. A toilet room(s) with self-closing door(s) opening into a vestibule with self-closing door(s) shall be provided for kitchen staff.
- 2. Each staff toilet room shall be provided with at least one water closet and one lavatory and shall be provided with hot and cold water at the lavatory.

- 3. Separate sinks shall be provided in the kitchen area for preparation of food, washing of utensils, and hand washing, and hot and cold water shall be supplied to all sinks in the kitchen area.
- 4. Floor drains shall be provided in the food serving area, kitchen area, scullery, garbage and rubbish rooms, and can-wash area.
- 5. Each floor drain in the food service area shall be flushed on a regular basis to ensure a continuous wet seal.
- 6. Wastewater from cleaning operations shall be disposed of through the building sewer system.
- 7. Garbage and rubbish rooms shall be well ventilated, screened, and vermin-proof.
- 8. All openings to the exterior from areas where food is prepared, served, or consumed shall be protected from flying insects by self-closing doors, screens, or controlled air currents.
- 9. Areas where odors or contaminants are generated, including kitchens, sculleries, and storage rooms, shall be mechanically ventilated.
- 10. Kitchen and food service equipment shall be serviced regularly and maintained in a safe, secure, and operational condition at all times.
- 11. Grease traps shall be inspected at least annually and cleaned out as needed.

## (q) Laboratories and Shops.

Laboratories and shops, where provided, shall comply with the general requirements found elsewhere in this section as well as the special safety provisions found herein. Examples of laboratory-type spaces are chemistry, physics, biology, and home economics labs. Examples of shop-type spaces are automobile, wood working, and welding shops.

- 1. Every science room, laboratory, or shop where students handle materials or chemicals potentially dangerous to human tissue shall be provided with a dousing shower, floor drain, and eye-wash facilities.
- 2. Automotive repair shops shall have engine exhaust systems.
- 3. Working machinery with component parts shall be color-coded per ANSI Z53.1, "American National Standard Safety Color Code for Marking Physical Hazards."
- 4. All equipment that is permanently mounted shall be securely anchored to its supporting surface.
- 5. Safety zone lines shall be marked on the floor areas surrounding working machinery.

See ANSI Z53.1 "American National Standard Safety Color Code for Marking Physical Hazards."

- 6. Master control valves or switches shall be provided in each laboratory-type space and each shop-type space that is equipped with unprotected gas cocks, compressed air valves, water service, or electric service that is easily accessible to students.
  - a. The master control valves and switches shall be clearly labeled and located in a nonlockable space strategically placed no more than 15 feet from the instructor's work station to allow for emergency cut-off of services and shall be in addition to the regular main gas supply cut-off.
  - b. Valves shall be completely shut off with a one-quarter turn.
  - c. The main supply cut-off shall shut down upon activation of the fire alarm system.
  - d. Emergency shut-offs are not required for ordinary office machines, computers, nonhazardous machines, and domestic sewing machines.
- 7. Woodworking areas shall have dust collectors and exhaust systems.
- 8. Welding shops shall have fume-removal and exhaust systems.
- 9. Hazardous work and storage areas shall be marked with warning signs.

Locate labs, shops, and computer rooms with minimal direct access from the exterior whenever possible.

Provide a lockable room for storing equipment and supplies.

## (r) Library and Media Centers.

Library and media centers shall comply with the general requirements found elsewhere in this section. The width of aisles, reach ranges, and seating in stacks and reading rooms shall comply with federal and state accessibility requirements. Libraries and media centers shall be kept below 60 percent relative humidity.

Circulation desks and reception room(s) should be located near the front entrance. Provisions should be made for separate, secure rooms or areas to keep audio-visual and computer equipment. Stack levels should be kept as low as possible and parallel with the supervisor's line of sight to support good room surveillance, minimizing theft and hiding niches. This is especially important if school libraries and media centers are co-located with community facilities.

(See Appendix, Laboratories, Shops, and Library/Media Centers.)

## (s) Open Plan Schools.

An open plan building, or portions of a building, may be subdivided into smaller areas by use of partial partitions, movable partitions, or movable furnishings. The partial partitions, moveable partitions, or moveable furnishings shall be located or arranged to make it possible for persons in one area of the plan to be immediately aware of an emergency situation in any other area of the plan.

Each space designed to be occupied by 50 persons or more shall have two or more means of egress as per Rule 69A-58.0081(12)(a), FAC, and into separate atmospheres in accordance with NFPA 101 Chapter 15.4.3. NFPA 101 Chapter 3.3.23.2 defines a separate atmosphere as the atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.

Open Plan Schools shall comply with NFPA 101 Chapter 15 15.4.3, "Flexible Plan and Open Plan Schools."

Where three or more means of egress are required, the number of means of egress permitted to enter into the same atmosphere shall not exceed two (NFPA 101 Chapter 15.4.3.3).

Flexible plan buildings should be permitted to have walls and partitions rearranged periodically only if revised plans or diagrams have been approved by the authority having jurisdiction (NFPA 101 Chapter 15.4.3.4) and are in full compliance with the Florida Building Code and the Florida Fire Prevention Code for new construction.

Flexible plan buildings should be evaluated while all folding walls are extended and in use as well as when they are in the retracted position (NFPA 101 Chapter 15.4.3.5) or any combination of open and closed positions.

(See Appendix, Open Plan Classrooms.)

- 1. Demountable or movable partitions in open plan classroom areas shall be a maximum of five feet in height and terminate a minimum of five feet from any permanent wall. All circulation openings in open plan areas shall be a minimum of five feet wide and open from floor to ceiling.
- 2. Movable furnishings shall have a stable base.
- 3. Partitions that abut a permanent wall in classroom areas shall have a side swinging door a minimum of three feet wide.
- 4. Furnishings shall not extend above the height of moveable partitions.

**Exception:** Furnishings at permanent walls may extend above the moveable partition height.

5. Hangings from ceilings, including artwork and other decorations, shall not impair sightlines to illuminated exit signs and shall not present a fire hazard.

### (t) Performing Arts Theaters and Auditoriums (Serving the Public).

Performing arts theaters and auditoriums, including the adjacent and related spaces associated with the main seating area, such as stages, dressing rooms, storage, lobby, public restrooms, work rooms, and kitchens, shall be in compliance with this section for casualty and sanitation safety and the Florida Fire Prevention Code for firesafety requirements.

#### (u) Pools.

Swimming pools, wading pools, and therapeutic pools, where provided, shall conform to the requirements in the Florida Building Code requirements for swimming pools.

- 1. Equipment rooms, dressing rooms, sanitary facilities, pool deck, and spectator areas, where provided, shall be in compliance with this section.
- 2. Pools shall be accessible to persons with disabilities.
- 3. Pools, if heated, shall be heated by either a solar energy system or a waste heat recovery system.

## (v) Shade/Greenhouses.

Shade or greenhouses, where provided, shall comply with the general requirements found elsewhere in this section, as well as the specific requirements that follow:

(See Appendix, Shade and Green Houses.)

- 1. A minimum of one accessible walkway shall be provided inside the shade/greenhouse. The accessible walkway shall be connected to doors leading to an accessible route to the permanent structure.
- 2. The exterior siding shall consist of breakaway type panels constructed of material other than glass, such as tear-away fabric, which shall be securely fastened to the structural frame.
- 3. Space heaters, where provided, shall be mounted at least six feet, eight inches above finished floor.

See NFPA 1 Chapter 13.6 "Portable Fire Extinguishers" for further information and requirements.

### (w) Stages.

Legitimate stages, regular stages, platforms, and thrust stages, including props and equipment, in grades pre-K through 12 and Florida college educational facilities shall conform to the general requirements found elsewhere in SREF, as well as the specific requirements that follow:

- 1. Each stage shall be accessible to persons with disabilities.
- 2. Legitimate Stage. A legitimate stage shall comply with the following:
  - a. Openings through stage floors (traps) shall be maintained in a safe and secure condition at all times and shall be equipped with tight-fitting trap doors having safety locks.

Provide a separate, secure entrance for the public if the facility is co-located with a community theatre or auditorium. Niches along sides should be minimized and, where the facility is utilized as classrooms or subdivided for community meetings, partitions should be fully recessed into walls to eliminate hiding spaces and entrapment zones.

b. The space between the floor and the stage of a platform above shall be free of storage or any use other than electrical wiring or plumbing to stage equipment.

See State Fire Marshal Rule 69A-58, FAC, and NFPA 101 Chapter 13.4.5 "Stages and Platforms" for fire separation and extinguishment requirements.

Fire safety curtain assemblies used for the protection of proscenium openings as required in NFPA 101 Chapter 13.4.5.7 shall be in accordance with NFPA 80 "Standard for Fire Doors and Other Opening Protectives," Chapter 20. NFPA 80 requires the rigging system to be inspected annually. However, it is recommended that middle schools conduct inspections three times per year and that elementary schools conduct inspections five times per year to ensure proper operation and safety. Educational facilities should retreat curtains as per the manufacturers recommendations. Replacements shall be in accordance with NFPA 80.

NFPA 101 Chapter 3, "Definitions," contains the following definitions for Stages and Platforms:

A platform is the raised area within a building used for the presentation of music, plays, or other entertainment. (See NFPA 101 Chapter 3.3.195.)

A stage is a space within a building used for entertainment and utilizing drops or scenery or other stage effects. (See NFPA 101 Chapter 3.3.246.)

A legitimate stage is a stage with a height greater than 50 feet. measured from the lowest point on the stage floor to the highest point of the roof or floor deck above. (See NFPA 101 Chapter 3.3.246.1.)

A regular stage is a stage with a height of 50 feet. or less measured from the lowest point on the stage floor to the highest point of the roof or floor deck above. (See NFPA 101 Chapter 3.3.246.2.)

(See Appendix, Platforms and Stages; Appendix, Regular Stage; and Appendix, Legitimate Stage.)

### (x) Storage.

## 1. General Storage.

General storage areas, where provided, shall be kept separated from mechanical spaces and shall be equipped with shelving, racks, bins, or other devices necessary to protect the stored materials, supplies, equipment, and books.

Mechanical and electrical equipment rooms shall not be used for storage other than in mechanical rooms where a reasonable number of items (e.g., filters) that are incidental to the maintenance of the equipment may be stored. The type of storage intended for each space will determine whether or not mechanical ventilation or air-conditioning is required. Some storage spaces may require mechanical exhaust to the exterior to expel heat, dust, or vapors, while others may require conditioned air to protect the items stored. If storage spaces do not receive either ventilation or conditioned air, provide a clear indication of the items to be stored.

2. Rooms and cabinets used for the storage, handling, and disposal of chemicals and

hazardous materials shall be:

a. Lockable.

#### b. Vented to the exterior.

Ventilation shall not be connected to an energy management system, programmable time clock, setback thermostat, heat-recovery equipment, fuel-fired equipment or equivalent. Vent fans should run continuously.

Storage cabinets used in laboratories shall not be required to be vented due to fire protection purposes as per NFPA 45 Chapter 9.2.3.5 "Standard on Fire Protection for Laboratories Using Chemicals."

If a storage cabinet is not ventilated, the vent opening shall be sealed with the bungs supplied with the cabinet or with bungs specified by the cabinet manufacturer.

If a storage cabinet is ventilated for any reason, the vent openings shall be ducted directly to a safe location outdoors or to a treatment device designed to control volatile organic compounds (VOCs) and ignitable vapors in such a manner that will not compromise the specified performance of the cabinet and in a manner that is acceptable to the authority having jurisdiction. (See NFPA 30 Chapter 9.5.4 "Flammable or Combustible Liquids Code.")

c. Kept at the manufacturer's recommended temperatures for the materials stored therein.

#### d. Well illuminated.

Class I flammable liquids and Class II combustible liquids that are not in use inside a laboratory shall be stored in safety cans, approved storage cabinets constructed in accordance with NFPA 30, "Flammable or Combustible Liquids Code," or in an inside liquid storage area. NFPA 30 Chapter 9 requires the following:

- (a) Storage of liquids shall not physically obstruct a means of egress.
- (b) Where containers, intermediate bulk containers, or portable tanks are stacked, they shall be stacked so that the stability is maintained and excessive stress on container walls is prevented.
- (c) Containers, intermediate bulk containers, or portable tanks stored in unprotected liquid storage areas shall not be stored closer than 36 inches to the nearest beam, chord, girder, or other roof or ceiling member.
- (d) Liquids used for building maintenance, painting or other similar infrequent maintenance purposes shall be permitted to be stored in closed containers outside of storage cabinets or inside liquid storage areas if limited to an amount that does not exceed a 10-day supply at anticipated rate of use.

According to NFPA 30 Chapter 3, "Definition and Classification of Liquids," Class I Flammable Liquids are as follows:

Class IA is any liquid that has a flash point below 73°F (22.8°C) and a boiling point below 100°F (37.8°C);

Class IB is any liquid that has a flash point below 73°F (22.8°C) and a boiling point at or above 100°F (37.8°C);

Class IC is any liquid that has a flash point at or above 73°F (22.8°C) but below 100°F (37.8°C);

And a Class II Flammable Liquid is any liquid that has a flash point at or above 100°F (37.8°C) and below 140°F (60°C). (See NFPA 30 Chapter 3.3.33.2.)

See also NFPA 1 Chapter 26 for further information regarding laboratories using chemicals.

- 3. Buildings and rooms used for the storage, handling, and disposal of poisonous or hazardous materials or liquids, and equipment powered by internal combustion engines and their fuels, shall be kept in a safe, secure, and orderly condition at all times.
- 4. A separate storage space shall be provided for all material that is poisonous or hazardous, and all equipment powered by internal combustion engines and fuels. These separate storage spaces shall be enclosed. Rooms with equipment powered by internal combustion engines and fuels shall open only to the exterior.
- 5. Custodial Storage and Work Areas.

Custodial storage and work areas for custodial supplies, leaning, and sanitation materials shall include appropriate shelving for storage of materials and shall be kept in a safe, secure, and orderly condition at all times.

6. Custodial Closets and Storage.

Custodial closets shall be kept in a safe, secure, and orderly condition at all times.

7. Lockers and Personal Storage.

Corridors and lobbies shall be free of any storage of clothing or personal effects, except where provided for in metal lockers.

8. Storage Shelving.

Shelving shall be free of any sharp corners, splinters, or any construction feature that would be hazardous to the occupants, and shall be constructed to carry the loads imposed.

- a. Shelving in science rooms, laboratories, shop storage rooms, and other places that contain hazardous materials shall have a one-half-inch lip on the front edge of each shelf and shall be constructed of noncorrosive material.
- b. Custodial, maintenance, and paint storage areas shall have shelves constructed of noncorrosive and noncombustible materials.

#### (y) Time-Out Rooms.

Time-out rooms shall comply with State Fire Marshal Rule 69A-58.0084, FAC. Special

permitting for the use of time-out rooms is required by State Fire Marshal Rule 69A-58, FAC.

- 1. Door Requirements. The door shall have only a push plate exposed on the interior of the room.
  - a. The door shall swing out of the room and shall be equipped with a fully-concealed track type closer.
  - b. The only permissible locking device shall be the electromagnetic locking device as allowed by State Fire Marshal Rules in Chapter 69A-58, FAC.

See State Fire Marshal Rule 69A-58.0084, FAC, for further information and requirements.

### 2. Finishes.

The ceiling, floor, and walls shall be free of any loose, torn, or potentially hazardous materials. All surfaces shall be kept smooth and free of any hooks, outlets, switches, or similar items.

## (z) Walk-In Coolers and Freezers.

Interior surfaces shall be kept clean and sanitary at all times.

Periodically inspect to verify that emergency release hardware is in place, maintained, and in proper working order.

### (14) Relocatable Buildings.

All relocatable units shall comply with the general requirements found elsewhere in SREF and the specific criteria that follow:

Crawl spaces underneath relocatable buildings must be secured by appropriate skirting to deny access. Skirting must provide secure entry gating for periodic inspection by appropriate fire marshal and school district personnel.

(See Appendix, Relocatables for Classroom Use.)

# (a) Annual Inspection of Existing Property Required.

Additional inspections and standards required for existing "satisfactory" relocatable classroom units shall include the following:

- 1. Board-Provided Inspections of Relocatables. Existing relocatable buildings, whether owned, leased, or lease-purchased, shall be inspected for compliance with the standards for existing "satisfactory" buildings as described in this section. Annual inspection reports shall be filed with the Board for all relocatables designed as classrooms or spaces intended for student occupancy. Correction plans for each cited deficiency shall be adopted by the Board. The inspection report for each relocatable shall be posted therein.
- 2. Inventory/Date of Construction. Each relocatable, whether owned, leased, or leasepurchased, shall be identified by a FISH number that links the unit to a date of construction. "Satisfactory" relocatables shall comply with standards for existing relocatables. Where an exact date of construction cannot be determined, an estimated

date of construction of the facility should be provided. Owned and leased buildings shall be included in FISH. Each student-occupied relocatable shall bear a current DBPR or DCA insignia and the insignia number shall be recorded in the "DCA Insignia" field in FISH. All other relocatables not used for student occupancy shall be reported in FISH, but do not require a DBPR or DCA insignia.

3. Inspection Report. The inspection report identifying each relocatable building by district inventory identification nomenclature shall be conspicuously posted within the building.

## (b) Standards for Existing "Satisfactory" Relocatable Classroom Buildings.

Existing relocatables, whether leased, lease-purchased, or owned, if constructed before the effective date of these rules, and which meet the standards in SREF and Section 1013.20, F.S., shall be identified as "satisfactory" in FISH and shall bear a current DBPR or DCA insignia upon evidence of compliance with standards required by DBPR rules. All relocatables used as classrooms or spaces intended for student occupancy shall have an annual inspection, meet the standards of this section, and bear a current DBPR or DCA insignia. These buildings shall be included in a corrective action plan filed with the Board and posted in each relocatable. District school boards shall include a plan for the use of existing relocatables within their 5-year district facilities work program. Relocatables that failed to meet the standards after the completion of the plan approved by the Commissioner on January 1, 2003, shall not be used as classrooms. The standards are as follows:

# 1. Construction Type.

Relocatable units shall be of Florida Building Code Type I, II, or IV (noncombustible), or Type III or Type V (combustible) construction as follows:

a. Noncombustible. Type I, II, or IV (noncombustible) construction shall be used where several relocatable units are joined under a single roof to create multiclassroom or other use spaces in excess of 2,000 square feet. Relocatables manufactured on or after January 5, 2000, shall be of Type I, II, or IV (noncombustible) construction or better if used as a classroom or other student-occupied space.

### b. Wood Frame.

- (1) Existing relocatables of Type III or Type V (combustible) construction owned by a school district shall be permitted to be used as permitted by this rule.
- (2) Existing relocatables of Type III or Type V (combustible) construction leased by a school district shall be permitted to be used as permitted by this rule.
- (3) Existing relocatables of Type III or Type V (combustible) construction may be used only for a single classroom unit of 1,000 gross square feet or less.
- (4) Two classroom units of Type III or Type V (combustible) construction may be joined together for a single use, such as exceptional education, teenage parent program, or science, provided the single classroom does not exceed 2,000 gross square feet, is without interior partitions (not including office, storage, and toilet), and has at least two remotely located exit doors.
- (5) Type III or Type V (combustible) construction shall be permitted to be used for district administrative functions.

### 2. Accessibility.

Relocatables shall comply with federal and state accessibility laws.

#### 3. Sites/Master Plan.

For sites where relocatables have been in use for four years or more and where there is no identifiable permanent replacement facility under construction to house the students or programs, campus master plans shall be developed indicating the maximum design capacity of core facilities, the locations of relocatables, the locations of covered accessible walks, and related infrastructure.

#### Covered Walks.

Relocatables used as classrooms or spaces intended for student occupancy, including "modular schools," which have been in use at a school site for four years or more shall be connected to the core facilities by covered accessible walkways. Where cost precludes compliance with this requirement within stipulated time limits, a transition plan shall be included in the Board's 5-year district facilities work program.

Exception: Temporary relocatables. The term "temporary relocatable" means relocatables that are used for fewer than four years to provide temporary housing while permanent replacement classrooms and related facilities are under construction, renovation, or remodeling. The term "temporary relocatable" does not apply to relocatables that have been located on a school site for four years or more and used for classrooms or for student occupancy.

Columns supporting covered walkways between existing relocatable buildings should be treated with climb-resistant paint or another surface coating that minimizes the possibility that they can be used to gain access to the roofs of walkways.

(See Appendix, Relocatables for Classroom Use.)

## b. Separation of Units.

Relocatable units shall be separated from each other and any permanent buildings in accordance with State Fire Marshal Rules in Chapter 69A-58, FAC, and by sufficient distance in each direction to prevent the spread of fire, and located to allow access by emergency vehicles. The locations shall be determined jointly with the local fire control authorities that service the site.

#### c. Clusters of Relocatables.

Clusters of relocatables shall comply with requirements of State Fire Marshal Rule 69A-58.0082(1), FAC.

#### d. Minimum Setbacks.

The minimum setback for relocatable units is at least 25 feet from a property line, unless a smaller setback is permitted by local zoning.

### e. Floodplain.

Relocatable units located in a 100-year floodplain shall have the finished floor at least 12 inches above the base flood elevation and shall be anchored to resist buoyant forces, if applicable.

### 4. Structure.

The structural integrity of the relocatable shall be sound, including roof, wall, foundations, and floor systems.

### a. Wind Uplift.

Wind uplift forces shall be countered by providing anchors from the roof to the walls, from the walls to the floor structure, and from the floor structure to the foundation.

### b. Connections and Reconnections.

Existing structural connections shall not be damaged from movement or rusted, and required nails or screw connectors shall be secure. Existing mechanical and electrical systems shall not be damaged from movement and shall be reconnected to ensure proper operation of all systems.

### c. Foundations.

Foundations for relocatables shall meet the Florida Building Code for wind uplift overturn conditions and load requirements for soil conditions.

### d. Foundation Standards for New Construction Apply When Moved.

When relocatables are moved to a new location on a new site or on the same campus, new foundations shall comply with new construction requirements of the Florida Building Code and ASCE-7 as adopted by the Florida Building Code. Foundations and tie-down or anchoring system plans shall be updated to meet wind uplift overturn conditions and soil conditions.

## e. Inspection.

The foundation and anchoring system shall have been inspected by a certified building inspector and the inspection approval document shall be on file with the district. Whenever an existing relocatable is moved inspections shall be made by a certified building inspector in accordance with Sections 109.3, 423.27.20, and 428.3, Florida Building Code, Building, and a firesafety inspection shall be performed by a certified firesafety inspector.

#### f. Tie-downs.

Tie-downs from the foundations to the relocatable structure shall not be damaged or rusted.

## 5. Fire-Retardant Wood.

Inspections of relocatables with roof structures constructed of fireretardant treated wood products, as allowed in Type I, II, or IV (noncombustible) construction, shall include the condition of metals, including structural connectors for the walls, roof, foundations, electrical equipment, mechanical equipment, and fire alarms.

#### 6. Roofing/Moisture Protection.

Weatherproofing systems shall be intact. Roofing caulking/sealants at penetrations in walls, roofs, and underside; and sealers at windows/doors shall not be damaged and shall be watertight. Holes and cracks shall be sealed.

#### 7. Doors.

- a. Exit doors shall be equipped with a lockset, which is readily opened from the side from which egress is to be made; heavy-duty hinges; a closer that prevents slamming; and a maximum one-half- inch high threshold.
- b. Accessible hardware shall be provided on all doors in a standard classroom unit.
- c. Interior and exterior doors shall be a minimum of three feet wide and six feet, eight inches high.

#### 8. Platform.

All exterior doors shall open onto a five- foot by five- foot platform that is level with the interior floor and connects with an accessible ramp or steps equipped with handrails and guardrails. An accessible ramp need only be provided at one of the two required doors from a standard classroom unit.

### 9. Operable Windows.

Classroom units constructed (meaning contracted, leased, or otherwise acquired) on or after July 1, 1990, shall have a combination of exterior doors and operable windows equal to at least five percent of the floor area of the classroom. Operable windows of the awning, casement or projecting type shall not project onto walks, ramps, steps or platforms in any open position.

#### 10. Finishes.

Finishes in single classroom units and multiclassroom buildings, including "modular schools," shall comply with the following:

### a. Toilet Rooms.

Ceilings in toilet rooms shall be of moisture-resistant materials. Walls in toilet rooms shall be finished with impervious materials to a minimum height of four feet. Vinyl wall covering shall not be permitted in toilet rooms. Floor and base in individual or group toilet rooms shall be impervious. Vinyl floor tile and applied resilient base material shall not be permitted.

#### b. Classrooms.

Classroom units and auxiliary area floors shall be covered with resilient materials or carpet and kept in a clean and sanitary condition at all times.

### 11. Child-Care/Teenage Parent Programs (TAP).

Child-Care/TAP, serving children from birth to age three, are permitted to be housed in standard classroom units of Type III or V (combustible) construction not to exceed 2,000 gross square feet. Where a residential-type kitchen is provided in these units, it shall include a residential range hood mechanically exhausted to the outside.

### 12. HVAC.

Heating/Ventilation/Air Conditioning systems shall be checked to ensure proper operation. The systems shall maintain design temperatures of at least 78 degrees Fahrenheit in the summer and 68 degrees Fahrenheit in the winter; and shall provide adequate humidity

control. Filters, coils, and condensate lines shall be clean, air flow and air distribution systems shall be functional; the system shall provide fresh air; outdoor intakes shall be clear of pollutant sources; and outdoor dampers shall operate properly. Adverse indoor air quality indicators shall not be in evidence. There shall be no signs of mold or mildew on carpet or walls in or around the HVAC system or toilet rooms.

### 13. Plumbing.

Plumbing systems and toilet rooms, where provided, shall meet code requirements for connections to water and sewer, shall not leak or drip, and shall be clean and sanitary.

#### 14. Electrical.

Electrical systems shall be checked for damage and proper operation. Technology systems, communication systems, lifesafety systems, and emergency systems shall be tested and shall operate properly.

#### a. Illumination.

Lighting fixtures shall be maintained in a safe, secure, and operational condition at all times.

## b. Technology.

Relocatables used as classrooms or spaces intended for student occupancy that have been in use at a school site for four years or more shall contain wiring and computer technologies for teaching and learning that are equivalent to and connected with the school's technology infrastructure found in permanent classrooms.

### 15. Firesafety Systems.

Firesafety systems and equipment shall comply with State Fire Marshal Rules in Chapter 69A-58, FAC, for relocatables.

### 16. Moving Relocatables.

Relocatable units designed to be moved on state roads shall comply with the maximum unit height, length, and width requirements of the Department of Transportation. Relocatable units shall be properly reinstalled at the new site in accordance with SREF, Section 5(14).

#### 17. Abandoned or Warehoused Relocatable Facilities.

Board facilities no longer in use that are abandoned or in storage but still owned shall be secured in such a manner as to prevent safety and sanitation hazards, unlawful entry, and vandalism from occurring. Abandoned or stored facilities returned to use shall be inspected and certified as meeting the standards for existing "satisfactory" relocatables prior to occupancy.

The interiors of abandoned or warehoused relocatables must be periodically inspected to ensure they are not being used for criminal, drug, tobacco, or alcohol-related activities. See also State Fire Marshal Rule 69A-58.006, FAC.

#### (15) Conveying Systems.

Conveying systems, where provided (including those for relocatables), shall meet the following minimum casualty safety and sanitation requirements for elevators, dumbwaiters, platform lifts, etc., as applicable:

## (a) Elevators.

Passenger elevators, where provided, shall comply with applicable state and federal accessibility requirements. Passenger and service elevators shall be inspected by qualified elevator inspectors certified by the Bureau of Elevator Safety, Department of Business and Professional Regulation.

Elevators shall be subject to periodic inspections and tests as specified in ASME A17.1/CSA B44 "Safety Code for Elevators and Escalators."

For more regulations for elevators, see Chapter 69A-47, FAC, "Uniform Fire Safety Standards for Elevators," which incoorporate Chapter 61C-5, FAC, Florida Elevator Safety Code by reference.

(See Appendix, Conveying Systems.)

## (b) Dumbwaiters.

Dumbwaiters, where provided, shall be maintained in an operable condition and car and counterweight safety devices shall lock the car or counterweight to the guide rails and disconnect power if hoist cables part or become slack.

## (c) Vertical Platform Lifts and Inclined Wheelchair Lifts.

Vertical platform lifts and inclined wheelchair lifts, where provided, shall comply with the following:

- 1. Lifts shall have shielding devices to protect users from the machinery or other hazards and obstructions.
- 2. Lifts shall be inspected by inspectors certified by the Bureau of Elevator Safety, Department of Business and Professional Regulation.
- 3. Lifts shall be provided with emergency power so that the lift continues with its operation if power is interrupted while the unit is in use.
- 4. Vertical platform lifts shall comply with the following:
  - a. A lift installed at a stage shall be free of a warning light or alarm.
  - b. A lift installed in a corridor shall allow free and clear ingress and egress at all times.
  - c. A lift's audio-visual alarm shall be operational at all times and shall activate when the lift is in operation.
- 5. Inclined wheelchair lifts shall comply with the following:
  - a. The platform/ramp bidirectional sensing device shall be operational and shall stop travel if obstructions are encountered.
  - b. Guide rails shall be maintained to be smooth, continuous, and free of sharp edges or obstructions. All drive system components shall contain safety features for protection of users, and cables and pulling devices shall be shielded.

c. The lift audio-visual alarm shall activate when the lift is in operation.

## (d) Vehicle Lifts.

Vehicle lifts, where provided, shall comply with the following:

- 1. Vehicle lifts shall be provided with mechanical safety locks to hold the lift in position in the event of a power or hydraulic failure.
- 2. The maximum lifting height for vehicle lifts shall be 68 inches.
- 3. Underground reservoirs for hydraulic lifts that are not accessible for inspection shall comply with DEP and EPA regulations.

Conveying systems shall comply with NFPA 101 Chapters 9.4 and 15.5.3.

Existing elevators, escalators, dumbwaiters and moving walks shall be maintained in accordance with requirements of ASME A17.3 "Safety Code for Existing Elevators and Escalators."

Periodic evaluation of all fire-rated walls is recommended to ensure that the integrity of fire-rated assemblies is maintained.

## (16) Mechanical.

Mechanical systems (including those for relocatables) shall meet the following minimum casualty safety and sanitation requirements for ventilation, building service equipment, plumbing, etc., as applicable:

## (a) Ventilation.

All occupied rooms and other rooms where odors or contaminants are generated shall be provided with either natural or mechanical ventilation.

- 1. Windows, louvers, or other openings used for natural ventilation shall be maintained in an operable condition at all times.
- 2. Mechanical ventilation systems shall be maintained in an operable condition at all times.
- 3. The HVAC system shall be inspected to ensure the system is operating as designed. HVAC systems shall be re-evaluated if space use changes have occurred or if unusual contaminants or unusually strong sources of specific contaminants were introduced into the space since the most recent inspection.
- 4. Exhaust systems from toilet rooms, custodial closets, food service kitchens, kitchen storage rooms, shower and locker rooms, athletic equipment rooms, etc., shall be maintained in an operable condition at all times. Exhaust from mechanical dishwashing areas shall not be discharged through the kitchen.
- 5. Science laboratory fume hoods and laboratory emergency fans shall be maintained in an operable condition. Science laboratories shall maintain ventilation rates as designed.

Fume hood replacements shall comply with NFPA 45 Chapter 8 "Laboratory Ventilating Systems and Hood Requirements." When replaced in existing facilities, laboratory units and laboratory hoods in which chemicals are present shall be continuously ventilated under normal operating conditions. (See NFPA Chapter 45 8.2.2.)

- 6. Building Service Equipment.
  - a. Mechanical equipment rooms and air-handler rooms shall be free of any type of storage except for filters required for the air-handling equipment in the room. Air conditioning filter storage shall not present a hazard.
  - b. Electric heaters where used for supplementary heating in toilet rooms, storage rooms, offices, etc., shall have heating elements protected.

Portable space heating devices shall meet code requirements of NFPA 1 Chapter 11.5.3.

- c. Through-wall and window-type air-conditioning units shall be maintained in a clean, safe, and secure condition at all times.
- 7. Cooling towers, where provided, shall conform to the following:
  - a. Towers with combustible interior or exterior construction installed over buildings shall have fire sprinkler systems maintained in an operational condition at all times.
  - b. Towers located on the ground shall be enclosed by a fence that is maintained in a safe and secure condition at all times.
  - c. Open spaces or areas between the base of the tower and ground or roof of the building upon which it is located shall be screened to prevent the accumulation of combustible waste material under the tower and to prevent use of such space or area under the tower for storage of combustible materials.
- 8. Walkway and building roofs shall be free of mechanical system piping (fluid system) and ducts (air system) unless written permission to do otherwise from the authority having jurisdiction is on file in the administrator's office.
- 9. Mechanical systems shall be connected to a properly functioning energy management system programmable time clock, setback thermostat, heat-recovery equipment, or equivalent that will reduce energy consumption during off-scheduled hours, nights, or weekends. The energy conservation device shall be maintained in an operable condition at all times or a program shall be in place to install one of these devices. Acceptable humidity levels shall be maintained.

Kiln rooms, chemical storage rooms, and flammable storage rooms shall not be connected to an energy management system, programmable time clock, setback thermostat, heat-recovery equipment, or equivalent.

10. Stationary local sources producing air-borne particulates, heat, odors, fumes, spray, vapors, smoke or gases in such quantities as to be irritating or injurious to human health

shall have an exhaust system to collect and remove the contaminants. Such exhaust shall discharge directly to the exterior of the building and shall be orientated away from occupied areas, parking lots, and other areas that may be adversely affected by the exhaust.

11. Gravity and wind-operated ventilators shall be allowed only for general storage rooms.

Periodic evaluation of all fire-rated walls is recommended to ensure that the integrity of fire-rated assemblies is maintained.

Mechanical systems shall comply with NFPA 101 Chapter 15.5.2.

## (b) Plumbing.

Every educational facility shall be provided with toilet and hand washing facilities for all occupants.

1. Toilet facilities shall be maintained in a satisfactory state of repair at all times.

Toilet facilities are second only to parking facilities in terms of vulnerability to vandalism and second only to parking facilities and off-grounds, adjacent buildings in terms of vulnerability to sexual batteries at public educational facilities, ("Safe School Design Guidelines," pp. 143-144). It is important, therefore, that Sections 2 a–c, and Sections 7, 9, and 10 (relative to maintenance) be rigorously observed to reduce the occurrence of "broken windows" effects, which can make worse the potential for crime and misbehavior in restrooms.

- 2. Toilet facilities shall be cleaned, disinfected, and serviced in accordance with district policies.
  - a. Water closets, urinals, lavatories, faucets, flush valves, dispensers, partitions, lower half of walls, and floors shall be maintained in a clean and sanitary condition at all times.

Pressure relief valves shall be regularly inspected and maintained in satisfactory condition.

- b. Water closet seats shall be free of any acidic bowl cleaner or other substance that is hazardous to occupants.
- c. Deodorizers shall not be used in toilet rooms. Air deodorizers are not to be confused with disinfectants.
- 3. All toilet facilities shall be accessible from all student-occupied spaces.
- 4. All toilet rooms shall be available for occupant use during the hours of operation.
- 5. Faculty and staff toilet facilities shall be separate from student facilities in pre-K through grade 12 educational facilities.
- 6. Unisex toilet rooms shall be provided only in child-care, pre-K through grade three, and ESE classrooms.

- 7. Group toilet rooms, where provided, shall meet the following requirements:
  - a. Entrances to group toilet rooms shall be provided with a partition or other shielding device to block occupants from view.
  - b. In group toilet rooms, a partition shall be placed between each water closet. Water closet stalls shall be provided with doors. The partitions and doors shall be maintained in a safe, secure, and operational condition at all times.
- 8. Each floor drain trap seal subject to evaporation shall be maintained in a "wet" condition at all times.
- 9. Drinking fountains shall be maintained in an operational condition at all times.
- 10. Shower facilities, where provided, shall be maintained in a clean and sanitary condition at all times. Water shall be heated and the temperature at the shower head shall not exceed 110 degrees Fahrenheit.
- 11. Foot baths shall not be provided unless they are required by a Board-approved educational program.

## (17) Electrical.

Electrical systems (including those for relocatables) shall meet the following minimum casualty safety and sanitation requirements as applicable:

### (a) Illumination.

1. Lighting fixtures shall be cleaned and maintained to provide the minimum required footcandles.

Emergency lighting requirements for means of egress in existing educational facilities shall be provided in accordance with the Florida Fire Prevention Code, NFPA 101 Chapter 15.2.9.

As per Section 7.9, Florida Fire Prevention Code, NFPA 101, emergency lighting facilities shall be arranged to provide initial illumination that is no less than an average of 1 footcandle (10.8 lux) and, at any point, no less than 0.1 foot-candle (1.1 lux), measured along the path of egress at floor level.

Approved existing emergency lighting installations shall be permitted to be continued in use as per Chapter 15.2.9.2, Florida Fire Prevention Code, NFPA 101.

2. General illumination shall be maintained so that the failure of any single lighting unit, such as an electric bulb, will not leave any occupied area or means of egress in darkness.

Nighttime illumination must be sufficient to discern faces from a distance of 40-75 feet away, especially at egress points and along external pathways. Where feasible, illumination should be sufficient to provide accurate color rendition at egress and assembly points.

### (b) Power.

Electrical wiring and equipment shall be maintained in a safe and secure condition at all times. Electrical wiring and equipment shall comply with the following:

- 1. Electrical outlets.
  - a. All outlets shall be grounded.
  - b. All convenience outlets installed within two feet (for construction prior to SREF 997) or within six feet (for construction under SREF 1997 or later) of water supplies, wet locations, toilet rooms, and the exterior with direct grade level access shall have a ground fault circuit interrupt (GFCI) protection device. (The GFCI protection device is not required for grounded receptacles serving only water coolers, if the receptacle is single or covered behind the water cooler enclosure.)

The ground fault circuit interrupt protection device is also not required for grounded receptacles serving washing machines, ice makers, refrigerators, freezers and coolers.

- c. Outdoor GFCI protected outlets shall be provided for all buildings.
- d. Flammable storage rooms shall be free of electrical receptacles.
- e. Extension cords shall not be stapled to any surface or shall not be run through or over doors, windows, or walls. They shall be used only in continuous lengths and without splice or tape. Adapters shall comply with Underwriters Laboratory and have over-current protection with a total rating of no more than 15 amperes.

(See Appendix, Electrical.)

- 2. Lighting and power controls.
  - a. Electric panels, cabinets, and rooms shall be accessible only to authorized persons.
  - b. Main service panels and switches shall be located in a dedicated, lockable room.
  - c. Electrical rooms shall be free of any storage.
  - d. Unobstructed access shall be provided to all electrical panels.
- 3. Emergency Shut-Off Switches.

It is recommended that a detailed diagram be provided in the instructor's office showing the operation of the emergency function. It is also recommended that each piece of shop equipment's disconnect switch be required to be reset after power is restored before equipment can be energized.

(See Appendix, Electrical.)

a. Every laboratory space that has electrical receptacles at student work stations shall have an unobstructed emergency shut-off switch strategically placed no more than 15 feet from the instructor's work station to allow for easy access by the instructor.

b. Every shop space that has power machinery accessible to students shall have two unobstructed emergency shut-off switches that shut off power to student-accessible machines and student-accessible receptacles in the shop. One emergency shut-off switch shall be located near the machinery and one emergency shut-off switch shall be located in the instructor's office, if there is a clear view of the entire shop area. (Nonhazardous machines not requiring emergency shut-off switches include office machines, computers, sewing machines, potter's wheels, and residential cooking equipment in home economics labs.)

The "Safety Checklist Program for Schools," developed by National Institute for

Occupational Safety and Health (NIOSH), shall be considered.

See http://www.cdc.gov/niosh/docs/2004-101.

c. A "panic" switch to deactivate power to the heating equipment shall be provided inside sauna and steam room(s), where provided. The switch shall be labeled to indicate the intended function.

## (c) Site Lighting.

Light fixtures, poles, and foundations used for site lighting, where provided, shall be maintained in a safe, secure, and operable condition at all times. Each site lighting pole is grounded.

See Rule 6A-2.0010, FAC, and Sections 1001.02, 1001.64(4), 1006.165, 1013.02, 1013.03(9), 1013.12, 1013.20, 1013.37, 1013.371, 1013.40, 1013.45, F.S.

This document contains only excerpts from Chapter 5, "State Requirements for Educational Facilities" (SREF, 2012), and State Fire Marshall Rule 69A-58, "Firesafety in Educational Facilities" and does not duplicate all the requirements for any particular subject found in the above documents or in the Florida Building Code, Florida Fire Prevention Code or Florida Accessibility Code for Building Construction. Users should review all requirements found in SREF 2012 and in SFM Rule 69A-58.

The State Fire Marshall Rule 69A-58, "Firesafety in Educational Facilities" can be accessed from the Florida Division of State Fire Marshal's website www. http://www.myfloridacfo.com.

# Firesafety in Educational Facilities

## **Chapter 69A-58, Florida Administrative Code**

#### 69A-58.001 Administration and General Requirements.

The Division of State Fire Marshal in consultation with the Department of Education hereby adopts firesafety rules for the use by boards and local fire officials when conducting plans reviews for new construction and firesafety inspections of new construction and existing buildings located in educational facilities, educational plants, ancillary plants, and auxiliary facilities to ensure the safety of occupants.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.001, Amended 11-26-06, 11-4-12.

The Division of State Fire Marshal worked with the Department of Education to develop these firesafety rules adopted for use by district school and Florida College boards and local fire officials.

#### 69A-58.002 Scope: New Construction and Existing Facilities.

- (1) This rule chapter establishes uniform requirements to provide a reasonable degree of safety from fire in new construction and existing buildings located in educational facilities, educational plants, ancillary plants, and auxiliary facilities under the jurisdiction of a school board or a public college board of trustees.
- (2) This rule chapter includes procedures for withdrawal of sites and facilities from use until unsafe conditions are corrected.
- (3) Section 1002.33(1), F.S., states, "All charter schools in Florida are public schools." Charter schools shall utilize facilities that comply with the firesafety provisions specified within its charter, or if the charter does not address specific firesafety provisions, the charter school shall utilize facilities that comply with the Florida Fire Prevention Code, the edition as adopted in Rule Chapter 69A-60, F.A.C., pursuant to Section 1002.33(18), F.S.
  - (a) All charter schools are subject to the inspection requirements of Rule 69A-58.004, F.A.C.
  - (b) Each board shall conduct or cause to be conducted each inspection required by paragraph 69A-58.004(1)(a), F.A.C., and the reporting requirements of paragraph 69A-58.004(6)(a), F.A.C.
- (4) Existing educational and ancillary facilities shall comply with the applicable provisions of NFPA 1 and NFPA 101, the Florida editions adopted in Rule 69A-3.012, F.A.C., except as modified by Chapter 1013, F.S., and this rule chapter.
- (5) Any time NFPA 1 or NFPA 101 refers to any other NFPA standard that has not been adopted by the Division of State Fire Marshal in this rule chapter, the referenced standard shall be the Florida edition adopted in Rule 69A-3.012, F.A.C.
- (6) Public colleges shall comply with the applicable chapters of NFPA 1 and NFPA 101, the Florida

editions adopted in Rule 69A-3.012, F.A.C., in accordance with the following:

- (a) Instructional buildings, classrooms with a capacity of fewer than 50 persons, and instructional laboratories are classified as a business occupancy.
- (b) Classrooms with a capacity of 50 persons or more are classified as an assembly occupancy.
- (c) Non-instructional laboratories are classified as an industrial occupancy.
- (7) Nothing contained in these rules prohibits a county, municipality, or independent special fire control district having firesafety responsibility and a school board or public college from entering into an agreement or an understanding which governs inspections, reviews, and approvals of new construction in the subject jurisdiction.

Rule 69A-58 utilizes the term "Public Colleges" and the State Requirements for Educational Facilities (SREF) Chapter 5 utilizes the term "Florida Colleges." In this document, "Public" and "Florida" have the same meaning when describing colleges in accordance with Chapter 4 of the Florida Building Code, Building. Section 423.5 "Definitions," FBC, defines "Florida College" as a public community college, public college, state college, or public junior college.

- (8) In the event of a conflict between the local fire official and the board on the requirement or interpretation of any provision of this rule chapter or Rule Chapter 69A-60, F.A.C., or the Florida Fire Prevention Code, the conflict shall be resolved by agreement between the local fire official and the board in favor of the requirement or interpretation of the code which offers the greatest degree of life safety or alternatives which would provide an equivalent degree of life safety and an equivalent method of construction.
- (9) If the local fire official and the board are unable to agree on which requirement, interpretation, or system provides the highest degree of lifesafety or alternatives which would provide an equivalent degree of lifesafety and an equivalent method of construction, either official may petition the division for a declaratory statement in accordance with Section 120.565, F.S., and any rules applicable thereto, setting forth each one's positions and reasons therefor. If both the board and the local fire official choose to file a petition, a joint petition should be filed. The division will make every effort to expedite the process of issuing a declaratory statement commensurate, however, with the time and publication requirements of Chapter 120, F.S.
- (10) The local fire official and the board are permitted to seek an informal nonbinding interpretation pursuant to Rule 69A-60.011, F.A.C. If such an informal opinion is requested, the request shall be given the highest priority by the Florida Fire Prevention Code Interpretations Committee and every effort shall be made to expedite a response.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.0215(13), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.002, Amended 11-26-06, 11-4-12.

#### 69A-58.003 Definitions.

As used in this rule chapter, the following definitions apply:

(1) "Ancillary plant" is comprised of the building, site, and site improvements necessary to provide

such facilities as vehicle maintenance, warehouses, maintenance, or administrative buildings necessary to provide support services to an educational program.

- (2) "Auxiliary facility" means the spaces located at educational plants which are not designed for student occupant stations.
- (3) "Board" means the school district or public college employing or contracting with a firesafety inspector certified pursuant to Section 633.081(2), F.S., with jurisdiction to make inspections of buildings and to enforce the firesafety codes, as required by these rules, which establish standards for design, construction, erection, alteration, repair, modification, or demolition of school district and public college buildings, structures, or facilities.

The Florida Fire Prevention Code Chapter 3 "Definitions," the Authority Having Jurisdiction (AHJ) is defined as an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

See the Florida Fire Prevention Code NFPA 101 Chapter 3.2.2.

- (4) "Board fire official" means the firesafety inspector certified pursuant to Section 633.081(2), F.S., who is appointed by the board under Section 1013.371(2), F.S.
- (5) "Building" or "board building" means any building or structure located on, upon, or in any educational facility, educational plant, ancillary plant, or auxiliary facility owned, rented, leased, or under lease-purchase agreement or lease-purchase option with a board. "Building" includes any permanent, fixed, relocatable, and manufactured building or structure.
- (6) "Division," including the lower case "division," means the Division of State Fire Marshal of the Department of Financial Services.
- (7) "Educational facilities" means the buildings and equipment, structures, and special educational use areas that are built, installed, or established to serve primarily the educational purposes and secondarily the social and recreational purposes of the community and which may lawfully be used as authorized by the Florida Statutes and approved by the boards. As used in these rules and unless otherwise clearly indicated by the context, "educational facilities" includes each educational facility, educational plant, ancillary plant, and auxiliary facility and all buildings and structures contained therein and thereon.
- (8) "Educational plant" comprises the educational facilities, site and site improvements necessary to accommodate students, faculty, administrators, staff, and the activities of the education program of each plant.
- (9) "Existing facility" means a facility or building that has been issued a certificate of occupancy prior to the effective date of this edition of this rule chapter.
- (10) "Florida Building Code" means the Florida Building Code as adopted in Rule 61G20-1.001, F.A.C., adopted pursuant to Section 552.73, F.S.
- (11) "FISH" means Florida Inventory of School Houses.
- (12) "Florida Fire Prevention Code" means the Florida Fire Prevention Code as adopted in Rule

69A-3.012, F.A.C.

"Florida Fire Prevention Code" includes codes as set forth in Rule 69A-58.

- (13) "Independent Special Fire Control District" means an independent special district as defined in Section 191.003(5), F.S., that was created for the purposes of fire prevention, fire suppression, or fire protection.
- (14) "Local fire official" means the county, municipality or independent special fire control district having firesafety responsibility employing or contracting with a firesafety inspector certified pursuant to Section 633.081(2), F.S., with jurisdiction to make inspections of buildings and to enforce the firesafety codes which establish standards for design, construction, erection, alteration, repair, modification, or demolition of public or private buildings, structures, or facilities or, where the context requires, the State Fire Marshal, as referred to in Section 1013.12(3) (b), F.S.
- (15) "New facility" means a facility that has not been occupied nor issued a building permit prior to the effective date of this edition of this rule chapter.
- (16) "NFPA 1" means the National Fire Protection Association Code 1, entitled the "Fire Code," the Florida edition as adopted in Rule 69A-3.012, F.A.C.
- (17) "NFPA 101" means the National Fire Protection Association Code 101, entitled the "Life Safety Code," the Florida edition as adopted in Rule 69A-3.012, F.A.C.
- (18) "Student-occupied space" means any area planned primarily for use by six (6) or more students.
- (19) The definitions in Section 1013.01, F.S., of words and terms found in Section 1013.12, F.S., or of words or terms found in this rule chapter apply to this rule chapter; however, in the event of a conflict between the definitions in Section 1013.01 or 1013.12, F.S., and these rules, the definitions in Sections 1013.01 and 1013.12, F.S., shall control.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.003, Amended 11-26-06, 11-4-12.

Section 69A-58.0031 of Rule 69A-58 "New Construction" is outside of the scope of "The Handbook for State Requirements for Existing Educational Facilities" and is provided for informational purposes only.

#### 69A-58.0031 New Construction.

- (1) New construction and new buildings are subject to and controlled by NFPA 1, the edition as adopted in Rule 69A-3.012, F.A.C., in Chapter 20.2, relating to "Educational Occupancies" and NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C., Chapter 14, "New Educational Occupancies," except where specifically otherwise provided in this rule chapter.
- (2) Notwithstanding any rule or adopted code or standard in conflict herewith, the following procedures apply with respect to new construction and new buildings.

- - 1. The board shall submit for review at least one copy of the site plan for each new facility and each new facility addition exceeding 2,500 square feet to the local fire official providing
  - 2. All site plans reviewed by the local fire official shall be reviewed in accordance with
  - 3. The board shall approve or cause to be approved the plans, drawings, designs, proposals, blueprints, and other construction or remodeling documents and evaluate the
  - 4. 4. In addition to the site plans submitted, the board may show compliance with all applicable firesafety codes and standards by at least one (1) of the means provided in
- (b) The method of compliance must be documented and maintained as part of the construction
- (c) Upon request by the local fire official, the board shall provide reasonable access to all construction documents and provide in writing to the local fire official the method(s) employed
- (3) The board must show compliance with all applicable firesafety codes and standards by
- (a) Prior to commencement of any new construction, renovation or remodeling:

  1. The board shall submit for review at least one copy of the site plan for each new and each new facility addition exceeding 2,500 square feet to the local fire official profire-protection to the facility in accordance with Section 1013.38(1), F.S.

  2. All site plans reviewed by the local fire official shall be reviewed in accordance Section 1013.38(1) F.S.

  3. The board shall approve or cause to be approved the plans, drawings, deproposals, blueprints, and other construction or remodeling documents and evaluate same for complete compliance with the Florida Fire Prevention Code.

  4. 4. In addition to the site plans submitted, the board may show compliance wapplicable firesafety codes and standards by at least one (1) of the means proving Sections 1013.38(2)(a) through (d), F.S.

  (b) The method of compliance must be documented and maintained as part of the construction documents and provide in writing to the local fire official the method(s) emit to achieve compliance with the Florida Fire Prevention Code.

  (3) The board must show compliance with all applicable firesafety codes and standards contracting with a firesafety inspector certified under Section 633.081, F.S.

  (4) A certificate of occupancy shall not be issued until the board's certified building official determined that the building or structure and its site conditions comply with all applicable states rules, and all applicable firesafety codes and standards.

  (5) Horizontal exits referenced in NFPA 101, section 14.2.2.5 and exit passageways referent NFPA 101, section 14.2.2.7 are prohibited.

  Report of the safety Inspections. (4) A certificate of occupancy shall not be issued until the board's certified building official has determined that the building or structure and its site conditions comply with all applicable statutes.
  - (5) Horizontal exits referenced in NFPA 101, section 14.2.2.5 and exit passageways referenced in

Rulemaking Authority 633.01(1), (7), 1013.12 FS. Law Implemented 633.01(7), 633.022, 633.025,

#### 69A-58.004 Firesafety Inspections.

- (1) There shall be one required annual inspection of existing educational facilities, ancillary plants, and auxiliary facilities, as follows:
  - (a) Pursuant to Section 1013.12(2)(c) F.S., a firesafety inspection of each building of each educational plant and each ancillary plant shall be made annually by the board.

The law is intended to ensure that every public school, charter school, and public college is inspected by an independent fire authority. The requirements and processes pertaining to firesafety in public schools are set forth in Chapter 1013, of the Florida Statutes.

(b) Pursuant to Section 1013.12(3) (b), F.S., a firesafety inspection of each building of each educational plant and each ancillary plant may be made annually by the local fire official.

In accordance with Section 633.081, FS, effective July 1, 2013, the classification of special state firesafety inspector is abolished, and all special state firesafety inspector certifications shall expire at midnight June 30, 2013. Any person who is a special state firesafety inspector on July 1, 2011, and who has at least 5 years of experience as a special state firesafety inspector as of July 1, 2011, may take the firesafety inspection examination for firesafety inspectors before July 1, 2013, to be certified as a firesafety inspector under this section. Upon passing the examination, the person shall be certified as a firesafety inspector as provided in section 633.081(b)2, F.S.

Each county, municipality, and special district that has firesafety enforcement responsibilities shall employ or contract with a firesafety inspector certified by the Division of State Fire Marshal to be eligible to conduct firesafety inspections in public educational and ancillary plants.

See Section 633.081, F.S., for further information.

- (2) The inspections in subsection (1), paragraphs (a) and (b):
  - (a) Are applicable to all buildings owned, leased, or being lease-purchased by the board, including all permanent and relocatable buildings;
  - (b) Shall begin not sooner than one (1) year after a new building has been occupied;
  - (c) Shall be performed in accordance with any applicable firesafety code or standard, such as NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C., or any other applicable code or standard which has been adopted in this rule chapter; and
  - (d) Are permitted and encouraged to be conducted jointly by the board and the local fire official and documented on one (1) inspection form. If the inspection is performed jointly, the inspection form shall clearly identify the name and certification number of each inspector and his or her employer. Each inspector must sign the inspection report.
- (3) Reports of the inspections in subsection (1) shall be filed with the local school board and the local site administrator.
- (4) A plan and schedule for correction of any deficiency in the inspection report shall be developed by any firesafety inspector finding a deficiency in conjunction with the board and shall be adopted and complied with by the board.
- (5) Each inspection report and plan of correction shall contain, at a minimum, the following information:
  - (a) The name of the school district or public college;
  - (b) The name of the board fire official and the local fire official (i.e., municipality, county, or independent special fire control district);
  - (c) The name of the facility inspected;

- (d) The type of facility inspected;
- (e) The facility address;
- (f) The number of the facility as listed in the Florida Inventory of School Houses (FISH #);
- (g) The name, address, and phone number of each inspector, and the designation of whether such inspector is a board fire official or is a local fire official;
- (h) The date of the inspection;
- (i) A report of each deficiency noted during the inspection. Each deficiency report shall contain:
  - 1. The building name or number and, if applicable, the FISH number of the building and room in which the violation was noted;
  - 2. A description of the violation or deficiency and the specific code citation for the violation or deficiency;
  - 3. The number of times this violation or deficiency has been cited, if applicable;
  - 4. The estimated correction date;
  - 5. The total number of violations or deficiencies cited not involving serious life safety hazards;
  - 6. The total number of violations or deficiencies cited involving serious life safety hazards;
  - 7. The date of the scheduled reinspection;
  - 8. A statement that the district or board has or has not complied with Section 1013.12(2) (c), F.S., as applicable;

In accordance with Section 1013.12(2)(c) of the Florida Statutes, firesafety inspections of each educational and ancillary plant must be made annually by persons certified by the Division of State Fire Marshal to be eligible to conduct firesafety inspections in public educational and ancillary plants. The board shall submit a copy of the firesafety inspection report to the local fire official within 10 business days after the date of the inspection.

9. A statement that the county, municipality, or independent special fire control district having firesafety responsibilities has or has not complied with Section 1013.12(3)(b), F.S., as applicable;

In accordance with Section 1013.12(3)(b) of the Florida Statutes, one firesafety inspection of each educational or ancillary plant may be conducted each fiscal year by the county, municipality, or special fire control district in which the plant is located using the standards adopted by the State Fire Marshal. The board shall cooperate with the inspecting authority when a firesafety inspection is made by a governmental authority under this paragraph.

10. Verification that the required fire drills have been completed; and

11. The signature of the firesafety inspector or inspectors conducting the inspection.

See Rule 69A-58.004 (6),F.A.C., below for submittal procedure and requirements.

- (6) The inspection required by subsection (1) shall be certified to the division by June 30 of each year.
  - (a) The board conducting a fire safety inspection under paragraph (1)(a) shall certify to the division that the inspection has been completed by electronically entering the required information regarding the inspection into the "School Inspection Reporting System" database and retain the original or a copy thereof. (www.myfloridacfo.com/SFM/)

There is only one authorized user for each of the county school districts and each of the public colleges. The registration code required to access the system is obtained through the State Fire Marshal office.

- (b) The local fire official conducting a firesafety inspection under paragraph (1)(b) shall certify to the division that the inspection has been completed by electronically entering the required information regarding the inspection into the "School Inspection Reporting System" database and retain the original or copy thereof.
- (c) The inspection report resulting from a joint inspection shall be certified by the board.
- (d) The board shall maintain with each yearly inspection report a list of corrected deficiencies from the prior fiscal year report.

To begin the submittal procedure online, the inspectors and other authorized authorities should log onto the Public School Fire Safety Report System (located at http://sfm.bebr.ufl.edu.) To complete the report, provide the following information:

- 1. The date the inspection was completed.
- 2. The name of the person conducting the inspection.
- 3. The certification number.
- 4. Whether the drills were completed at the time of inspection.
- 5. Verify building address, contact information, and occupancy type.
- (7) Any firesafety inspector certified in accordance with Section 633.081, F.S., or other designated employee authorized by a unit of government may access the "School Inspection Reporting System" via the internet at (http://sfm.bebr.ufl.edu/). Inspection authorities and the public may access the "School Inspection Reporting System" through the Division's website located at (www. myfloridacfo.com/SFM/).

Rulemaking Authority 633.01(1), (7), 633.022, 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.004, Amended 11-26-06, 5-18-08, 11-4-12.

#### 69A-58.0041 Charter Schools.

(1) All authorized charter schools located on property that is owned or leased by a school district or a public college shall be inspected in accordance with the provisions of Section 1013.12, (2)

- (e), F.S., and the provisions of this rule chapter.
- (2) All other authorized charter schools shall be inspected by the local fire official providing emergency services to the charter school in accordance with Section 1013.12, (5)(b) F.S., and the provisions of this rule chapter.
- (3) Inspections of charter schools shall be certified to the division using the same procedure as all other public schools and colleges in accordance with Rule 69A-58.004(6) F.A.C.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 663.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History- New, 11-4-12.

All charter schools must meet the requirements of the state minimum codes referenced in statute and local building department amendments. However, the local fire official is only responsible for inspecting charter schools that are located on public property. Such required inspections shall be done in accordance with Chapter 1013 of the Florida Statues.

#### 69A-58.005 Serious Life Safety Hazards.

- (1) Serious life safety hazards as set forth in Section 1013.12, F.S., and in paragraph (b), below, require prompt corrective action by the board or withdrawal of the educational or ancillary plants or affected portions thereof from use until corrected.
- (2)(a) Serious life safety hazards include:
  - 1. A non-functional fire alarm system. A non-functional fire alarm system is one impaired to the extent that a significant portion is not in operation and the system is incapable of functioning as it was designed.

As a temporary measure, a fire watch as approved by the local authority having jurisdiction can be utilized for a limited period of time when alarm systems are non-functional due to maintenance and repair of the system. FFPC, 3.3.114, NFPA 101, 3.3.97.

- 2. A non-functional fire sprinkler system. A non-functional fire sprinkler system occurs any time a significant portion of any one zone (1) is impaired to the extent that the sprinkler system is incapable of automatic activation within the protected space or when any system component lacks an adequate water supply.
- 3. A door with a padlock or other lock or device which precludes egress at any time;

If access to or within a structure or area is unduly difficult because of secured openings or immediate access is necessary for life-saving or fire-fighting purposes, the authority having jurisdiction shall be permitted to require a key box to be installed in an accessible location. The key box shall be an approved type and contain keys to gain access as required by the AHJ. (See Florida Fire Prevention Code NFPA 1 Chapter 18.2.2.1.)

- 4. An inadequate exit;
- 5. A hazardous electrical system condition;
- 6. Potential structural failure:

- 7. Storage conditions that create a fire hazard.
- (b) Other conditions may be identified to the division by the board fire official or local fire official for designation as a serious life safety hazard, including but not limited to:
  - 1. The placement of a functional smoke and heat detector in a manner not consistent with NFPA 72, the edition as adopted in Rule 69A-3.012, F.A.C.;
  - 2. An inaccessible or expired fire extinguisher; and

Additional fire extinguishers, as permitted in accordance with NFPA 10, shall be tagged and certified, fully charged, kept in operable condition, and preferably placed within a "do not use" designated area. If the fire extinguisher is not required but available for use, it must have a current inspection tag by a licensed fire extinguisher dealer.

Fire extinguishers shall be conspicuously located where they are readily accessible and immediately available in the event of a fire in accordance with NFPA 10 Chapter 6.1.3.1. When required fire extinguishers are placed inside a room and their location is indicated with a permanently affixed sign that reads "Fire Extinguisher Inside," access to the room shall be maintained and the room must remain unlocked when the building is occupied. Inaccessible rooms containing fire extinguishers that are not required, do not require a sign.

3. A door required to be self-closing with a doorstop, wedge, or other device or object holding it open.

A door required to be self-closing is considered a part of a protected means of egress and shall not be secured in the open position at any time in accordance with NFPA 101 Chapter 7.2.1.8.1. Holding a self-closing door open with a doorstop, wedge, or other device or object creates a serious life safety hazard because the door no longer performs as intended.

Magnetic hold-opens are not permitted on any door in a rated wall or smoke-tight corridor unless they are controlled by an alarm system.

- (c) The criteria to be used by the division to determine whether such other condition shall be designated as a serious life safety hazard shall be either:
  - 1. Those conditions located in section 6.2, NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C., to wit:
    - a. The relative danger of the start and spread of fire,
    - b. The danger of smoke or gases generated, and
    - c. The danger of explosion or other occurrence potentially endangering the life and safety of any occupant of the building or structure.
  - 2. Hazard of contents shall be determined by the board or local fire official on the basis of the character of the contents and the processes or operations conducted in the building or structure. For the purposes of these rules, where different degrees or hazard of contents

exists in different parts of a building or structure, the most hazardous shall govern the classification unless hazardous areas are separated or protected as specified in section 8.4 and the applicable sections of Chapters 11 through 42 of NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C.; or

3. Upon a finding of a dangerous condition consistent with the criteria located in NFPA 1, section 3.3.39.1, the edition as adopted in Rule 69A-3.012, F.A.C., for extra high hazard occupancies, based on the total amount of Class A combustibles and Class B flammables present, in storage, production, use, finished product, or combination thereof, and when such material is over and above those expected in occupancies classed as ordinary (moderate) hazard. Those areas or occupancies could consist of woodworking, vehicle repair, cooking areas, product displays, and storage and manufacturing processes such as painting and coating, including flammable liquid handling. Also included is warehousing of or in-process storage of other than Class I and Class II commodities as defined by NFPA 13, Standard for the Installation of Sprinkler Systems, section 5.6.3, the edition as adopted in Rule 69A-3.012, F.A.C.

Rulemaking Authority 633.01(1), (7), 1013.12(1), (8) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.005, Amended 11-26-06, 11-4-12.

#### 69A-58.006 Vacant and Abandoned Buildings.

Board buildings no longer in use and abandoned shall be free of combustible waste and secured in such a manner as to prevent firesafety hazards and unauthorized or unlawful entry.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.006, Amended 11-26-06.

In accordance with NFPA 1 Section 10.13.1, every person owning or having charge or control of any vacant building, premises, or portion thereof shall remove all combustible storage, waste, refuse, and vegetation and shall lock, barricade, or otherwise secure the building or premises to prohibit entry by unauthorized persons.

Vacant and abandoned facilities are significant crime magnets and should be inspected periodically with a frequency as determined by the AHJ. It is highly recommended that such facilities be inspected at least every two months.

See NFPA 1 Section 10.13 and SREF Chapter 5 Section 1(i) for further information and requirements for vacant and abandoned buildings.

# 69A-58.007 Counties, Municipalities, and Independent Special Fire Control Districts Having Firesafety Responsibilities, Without Firesafety Inspectors.

(1) Any county, municipality, or independent special fire control district having firesafety responsibilities which does not employ or has not contracted with a firesafety inspector certified under Section 633.081(1), F.S., to enforce the Florida Fire Prevention Code as required by Section 633.025(2), F.S., at the time of the adoption of this rule chapter is permitted to contact the division and request that the division perform the inspections required by the local fire official pursuant

to Section 1013.12(3), F.S., and this rule chapter and performed under Section 633.081(1), F.S.

- (2) Upon receiving such request, the division shall perform the inspections required by this rule chapter during the period of time the county, municipality, or independent special fire control district is not in compliance with Section 633.081(1), F.S., and does not employ or is not under contract with a firesafety inspector certified under Section 633.081(1), F.S., not, however, to exceed one (1) annual inspection per facility.
- (3) Each such county, municipality, or independent special fire control district having firesafety enforcement responsibilities shall employ or contract with a firesafety inspector certified under Section 633.081(2), F.S., pursuant to the requirement of Section 633.081(1), F.S., to fulfill the obligation imposed by Section 633.025, F.S.
- (4) No county, municipality, or independent special fire control district having firesafety enforcement responsibilities which employs or contracts with a firesafety inspector as of the effective date of Section 1013.12, F.S., is authorized to request that the State Fire Marshal perform the inspections referred to in this section, and the State Fire Marshal shall not perform any inspection for such county, municipality, or independent special fire control district having firesafety responsibilities.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 633.081, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.007, Amended 11-26-06, 11-4-12.

# 69A-58.008 Standards and Requirements for Existing Buildings; Exceptions to Rule Chapter 69A-60, the Florida Fire Prevention Code.

- (1) General Safety Requirements for all Buildings in all Facilities or Plants.
- (2) Except as set forth in Section 1013.12, F.S., and this rule chapter, educational facilities are subject to Rule Chapter 69A-60, F.A.C., the Florida Fire Prevention Code.
- (3) The standards and requirements in this rule chapter pertain to educational facilities and are exceptions to Rule Chapter 69A-60, F.A.C. In the event of a conflict between this rule and Rule Chapter 69A-60, F.A.C., and notwithstanding paragraph 69A-60.002(3)(d), F.A.C., relating to this rule chapter, the provisions of this rule chapter control the standards and requirements for educational facilities.
- (4) Fire department access roads. Paved fire department access roads shall not completely encircle an educational plant or portions thereof.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.008, Amended 11-26-06.

#### **69A-58.0081 Means of Egress.**

(1) Doors.

See NFPA 101 Section 15.2.2.2 "Doors" and State Requirements for Educational Facilities, SREF Chapter 5 Section 5b for further information and requirements.

#### (See Appendix, Doors and Windows.)

- (a) All doors in fire rated or smoke proof corridors shall be self-closing doors.
- (b) Opposite swinging smoke stop doors in smoke partitions within the corridor shall comply with the requirements of section 8.4.3 of the edition of NFPA 101, as adopted in Rule 69A-3.012, F.A.C.
- (c) Darkroom doors.
  - 1. In darkrooms with a capacity of 10 or more persons, a revolving darkroom door, if used, shall:
    - a. Have a pop-out safety feature; and
    - b. Be equipped with a remotely located side-hinged door for secondary egress.
  - 2. In darkrooms with a capacity of fewer than 10 people, a revolving darkroom door with a pop-out safety feature is permitted to be used as the primary means of egress.
  - 3. Revolving darkroom doors with a pop-out safety feature shall be conspicuously labeled.
  - 4. In buildings designed on or after October 18, 1994, the requirements of this section apply to darkrooms with an occupancy of 6 or more.
- (d) Exit doors shall swing in the direction of exit travel.
- (e) All egress doors and gates, regardless of use or location serving spaces designed to be occupied by 6 or more students, shall swing in the direction of exit travel.

In administrative areas subject to student occupancy of 6 or more, such as conference rooms, career rooms, clinics, and student services, doors shall swing in the direction of exit travel.

(See Appendix, Number of Required Means of Egress.)

- (2) Existing smoke stop doors shall meet the requirements of section 8.3.4 of NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C.
  - (a) Smoke stop doors may be used to create a secondary means of egress from interior instructional spaces.
  - (b) When a pair of smoke stop doors is located within a corridor, each leaf shall be designed to swing in a direction opposite from the other and each leaf in the pair of doors shall swing in a right-hand direction.
  - (c) Door stops shall be provided at the head and sides of smoke stop door frames.
  - (d) Smoke stop door frames shall be free of center mullions.
  - (e) Smoke stop doors shall be free of locking devices and may be held in the open position

only in accordance with section 7.2.1.8 of NFPA 101.

- (3) Special Function Doors.
  - (a) Special function doors such as revolving doors, power operated doors, or horizontal sliding doors shall not be used as a means of egress.
  - (b) Revolving doors shall have a side-hinged exit door within 10 feet and within the same wall.
  - (c) Turnstiles shall comply with section 7.2.1.11 of NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C.
- (4) Folding Doors and Folding Partitions. Where permanently mounted folding or movable partitions are used to divide a room into smaller spaces capable of being occupied by 6 or more persons, a separate exit from each space or a permanent full height 5 foot wide opening between the spaces shall be provided. This requirement applies to spaces occupied by 10 or more persons in buildings occupied prior to October 18, 1994.
- (5) Gates used to secure buildings or used for egress shall be side-hinged and shall allow egress at all times without assistance from the side from which egress is to be made.
- (6) Screen and storm doors on exits shall be hinged on the same side as the exit door and swing in the direction of exit travel.
- (7) Doors and gates shall be equipped with hardware which allows egress at all times.

The classroom security function that allows the outside lever to be locked with a key from either the inside or outside, while keeping the inside lever unlocked for unrestricted egress, may be used.

(See Appendix, Acceptable Lockset Functions and Hardware.)

- (8) All fire-rated doors and solid core doors in partitions rated at 1/2 hour or more, or installed in smoke-tight partitions, shall be self-closing.
- (9) Emergency Rescue (Escape) Openings (Secondary Means of Egress).
  - (a) In existing non-sprinklered buildings, every instructional space, and other spaces normally subject to student occupancy of 10 or more, shall have at least one (1) window, panel, or door leading to the exterior or to a separate atmosphere.
  - (b) For buildings designed after October 18, 1994, the emergency rescue (escape) opening shall be provided in rooms over 250 square feet used for classroom or other educational purposes or normally subject to student occupancy of 6 or more.

(See Appendix, Number of Required Means of Egress and Appendix, Emergency Rescue Openings.)

(c) Windows and panels shall be operable from the inside by a single operation and without

the use of tools.

- (d) A security screen or grill installed on a window or panel shall be operable from the inside by the same single operation as the window or panel and without the use of tools. The release device shall be readily identifiable and accessible.
- (10) Interior instructional spaces shall be provided with side-hinged or double acting communicating doors providing secondary means of egress and emergency rescue (escape). The door shall provide direct access to:
  - (a) A separated exit corridor;
  - (b) A separate atmosphere;

According to NFPA 101 Chapter 3.3.23.2, a separate atmosphere is defined as the atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.

(See Appendix, Separate Atmosphere.)

- (c) At least one enclosed exit stair; or
- (d) Another classroom which has a minimum of two doors that open to separate atmospheres.

When buildings are protected throughout by an approved automatic sprinkler system in accordance with NFPA 101 Chapter 9.7, the requirements of 69A-58.0081(10), F.A.C., do not apply.

- (11) Specialties and Signage.
  - (a) Emergency rescue openings shall be marked with a sign that reads: "EMERGENCY RESCUE KEEP AREA CLEAR."
  - (b) Secondary means of egress and emergency escape openings shall be marked with a sign that reads: "EMERGENCY ESCAPE" or "EMERGENCY EGRESS KEEP AREA CLEAR".

Emergency rescue window signs shall be located so that they are visible and will not be

covered by curtains or blinds.

(See Appendix, Emergency Rescue Openings.)

(c) Where manual pull stations are located inside student-occupied spaces, a permanently affixed sign reading "FIRE ALARM PULL STATION INSIDE" shall be placed outside that space and adjacent to the door. The door to the occupied space shall be unlocked at all times the facility is occupied.

If the manual pull station only serves the student-occupied space or if code requirements are met, not including the pull station in question, a sign outside the space and continual access when the building is occupied is no longer required.

(See Appendix, Fire Alarm Systems.)

(d) A graphic diagram of primary and secondary evacuation routes shall be posted adjacent to the primary exit door from each student-occupied space. The diagram shall clearly indicate, by contrasting color and number, the primary and secondary route of evacuation.

**Exception:** When an exit door from a self-contained classroom opens directly to the exterior.

Signs indicating evacuation routes must be clear and must be revised when conditions for exiting change due to remodeling and/or additions.

Primary and secondary routes should be clearly indicated on egress signs. Whenever possible, maps should be oriented according to viewer.

### (12) Open Plan Schools.

(a) Each space designed to be occupied by 50 persons or more shall have 2 or more means of egress.

NFPA 101 Chapter 15.4.3.2 states that "Each room occupied by more than 300 persons shall have 2 or more means of egress entering into separate atmospheres." In this case, the requirement for 2 or more means of egress with an occupancy of 50 persons or more as stated in Rule 69A-58.0081(12)(a),F.A.C., is more restrictive than 300 or more occupants as stated in NFPA 101. Therefore, 2 or more means of egress are required for each space designed to be occupied by 50 persons or more as per Rule 69A-58, F.A.C. However, in accordance with NFPA 101, these 2 means of egress must enter into separate atmospheres.

NFPA 101 Chapter 3.3.23.2 defines a separate atmosphere as the atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.

See Rule 69A-58.0081(12)(b), F.A.C., for further requirements for Open Plan Schools.

(b) Open plan assembly areas shall have exits leading directly to the exterior and shall be separated from other required exits of the open plan.

Open Plan Schools shall comply with NFPA 101 Chapter s15.4.3, "Flexible Plan and Open Plan Buildings."

Flexible plan buildings shall be permitted to have walls and partitions rearranged periodically only if revised plans or diagrams have been approved by the authority having jurisdiction (NFPA 101 Chapter 15.4.3.4) and are in full compliance with the Florida Building Code and the Florida Fire Prevention Code for new construction.

Flexible plan buildings shall be evaluated while all folding walls are extended and in use as well as when they are in the retracted position (NFPA 101 Chapter 15.4.3.5) or any combination of open and closed positions.

See also State Requirements for Educational Facilities 5(13)(s).

(See Appendix, Open Plan Classrooms.)

(13) Maximum travel distances.

(See Appendix, Separation of Means of Egress and Appendix, Travel Distance.)

- (a) Exits shall be maintained so that the maximum length of travel from any point in the building or space (including places of assembly) to an exit shall not exceed 150 feet.
- (b) In a building equipped with a fully automatic fire sprinkler system, the travel distance to an exit may be increased to 200 feet.
- (c) Open mezzanines shall be permitted to exit to the exterior from within the space below.
- (14) Corridors and hallways.
  - (a) Corridors shall be arranged so that each end leads to an exit and shall be without pockets or dead ends more than 20 feet in length.
  - (b) Hallway widths in office and service areas shall be a minimum of 44 inches in width.
  - (c) Child Care. Areas designated for children's sleeping mats, cots, or cribs shall include a clearly marked exit passageway.

Exit passageways may be designated by markings on the floor or similar methods.

(See Appendix, Dead-End Corridors.)

- (15) Interior Stairs, Exterior Stairs, and Smoke-Proof Towers.
  - (a) The minimum clear width of stairways serving as a required means of egress for student-occupied areas shall be 44 inches.

(See Appendix, Stairs.)

- (b) All interior stairways shall open directly to the exterior, into a protected vestibule or into a protected corridor that opens to the exterior.
- (c) The areas above or below exit stairs and ramps, whether interior or exterior, shall not be used as a closet for storage of any kind, or for any other purpose.

(See Appendix, Interior Stairs.)

(d) Interior corridors or stairwells shall be free of piping systems designed for flammable liquids or gases.

#### (16) Kilns.

(a) Kiln rooms and areas shall be provided with adequate exhaust to dispel emitted heat to the exterior.

- (b) Kilns shall be located away from paths of egress or exits.
- (c) Kilns shall be located in separate rooms when serving students through grade three.
- (d) Kiln rooms shall be provided with automatic heat or smoke detection devices appropriate for the environment.

Kilns brought into an existing facility must meet all code requirements for new construction. Kiln exhaust systems should be independent of any other exhaust system and should not be connected to an energy management system, programmable time clock, setback thermostat, heat-recovery equipment, or equivalent.

See Florida Building Code, Building,423.23 "Kilns" and State Requirements for Educational Facilities 5 (13)(o).

See also the applicable edition of NFPA 86 "Standard for Ovens and Furnaces" for further information regarding the installation and operation of kilns. This standard applies to new installations or to alterations or extensions to existing equipment.

#### (17) Boiler Rooms.

- (a) Boilers shall comply with Chapter 554, F.S., and Rule Chapter 69A-51, F.A.C. A valid boiler inspection certificate of compliance issued by the State Fire Marshal shall be displayed and clearly visible, when required.
- (b) Each boiler room door shall:
  - 1. Open directly to the outside and, if opening toward a building or path of egress, shall have opening protection in accordance with section 8.3.4 of NFPA 101, or
  - 2. When a door opens into the interior of the building, the door shall swing into the boiler room and have opening protection in accordance with section 8.3.4 of NFPA 101.
- (c) All rooms housing a fuel-fired heat producing appliance that does not meet the minimum thresholds of Rule Chapter 69A-51, F.A.C., and with an input capacity of 60,000 BRUs per hour or more, and that is intended to supply hot water or steam, shall be equipped with heat detectors connected to any required fire alarm system. Access room doors shall have opening

protection in accordance with section 8.3.4 of NFPA 101.

When buildings are protected throughout by an approved automatic sprinkler system in accordance with NFPA 101 Section 9.7, the requirement of Rule 69A-58.0081(17)(c), F.A.C., does not apply.

- (18) Shade Houses or Green Houses.
  - (a) A minimum of two remotely located side-hinged doors that swing in the direction of egress shall be provided from each shade or green house.
  - (b) Fire alarm pull stations shall be located within 200 feet of any shade or green house.

(c) Fire alarm horns shall be audible inside the shade or green house. See NFPA 1 Chapter 13.7 for further information and requirements.

(See Appendix, Shade and Green Houses.)

(19) Stages and Platforms. Stages and platforms, including props and equipment, shall conform to the specific requirements of Chapter 13 of NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C.

NFPA 101 Chapter 3 "Definitions" contains the following definitions for Stages and Platforms:

A platform is the raised area within a building used for the presentation of music, plays, or other entertainment. (See NFPA 101 Chapter 3.3.195.)

A stage is a space within a building used for entertainment and utilizing drops or scenery or other stage effects. (See NFPA 101 Chapter 3.3.246.)

A legitimate stage is a stage with a height greater than 50 ft. measured from the lowest point on the stage floor to the highest point of the roof or floor deck above. (See NFPA 101 Chapter 3.3.246.1.)

A regular stage is a stage with a height of 50 ft. or less measured from the lowest point on the stage floor to the highest point of the roof or floor deck above. (See NFPA 101 Chapter 3.3.246.2.)

(See Appendix, Platforms and Stages; Appendix, Regular Stages; and Appendix, Legitimate Stages.)

(20) Electrical. Emergency lighting shall be provided in all student-occupied areas and group toilets.

Rulemaking Authority 633.01(1), (7), 633.022, 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 11-26-06, Amended 5-18-08.

#### 69A-58.0082 Relocatable Buildings.

- (1) Relocatable buildings: Relocatable buildings sited after March 1, 2002, shall be separated as required by the Florida Building Code.
  - (a) Relocatable buildings shall be located to allow access by emergency vehicles to at least one (1) elevation of each building as approved by the local fire fighting authority that services the site in accordance with Chapter 18 of NFPA 1.
  - (b) Relocatable buildings sited within a cluster in accordance with this section are permitted to achieve emergency vehicle access by providing vehicular access to within 200 feet of the entrance of the most remote relocatable unit and shall be provided with an independent fire alarm system with a manual pull station within 100 feet of each egress door.

**Exception:** When required by the board, a cluster shall be protected by a fire zone extended from the main educational facility's fire alarm control panel.

In addition, all of the following requirements shall be met:

- 1. The minimum overhead open space within the perimeter of the cluster shall be 50% of the maximum conditioned gross area of the relocatable units within the cluster.
- 2. The minimum separation between individual units shall be as approved by the building official in accordance with Chapter 553, Part IV, F.S., the "Florida Building Code."
- 3. The nearest permanent building or cluster shall be a minimum of 60 feet.
- 4. Any unprotected opening between adjacent wall spaces shall be as approved by the building official in accordance with Chapter 533, Part IV, F.S., the "Florida Building Code."
- 5. The minimum setback for non-combustible relocatables buildings shall be as permitted by local zoning requirements.
- (2) Multi-classroom units of non-combustible construction shall have a primary exit door opening directly to the exterior or, if served by interior corridors, shall have a primary exit door and an emergency rescue opening in each space designed to be occupied by six (6) or more students.
  - (a) This requirement applies to spaces occupied by ten (10) or more persons for buildings designed prior to October 18, 1994.
  - (b) An emergency rescue opening is not required when a door opens directly to the outside.
- (3) Fire Alarm Systems.

It is the intent that an unsupervised space does not include the space under a relocatable building providing this space is not used for any storage at any time. If the space under a relocatable building is used for storage, then it must be protected by a heat or smoke detector listed for that application.

- (a) In combustible construction, heat or smoke detectors connected to the building's fire alarm system shall be installed in every classroom, unsupervised space, storage space, and custodial closet.
- (b) In non-combustible construction, heat or smoke detectors connected to the building's fire alarm system shall be installed in each custodial closet.
- (c) Relocatable buildings sited a minimum of 60 feet from another relocatable building and a minimum of 60 feet from any permanent building may be served by an independent fire alarm system.
- (d) Drill switches shall not be permitted except where a computerized fire alarm system is specifically listed for this purpose.

Rulemaking Authority 633.01(1), (7), 633.022, 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History—New 11-26-06.

(See Appendix, Relocatables for Classroom Use.)

#### 69A-58.0083 Protection from Hazards.

- (1) Interior vertical openings such as stairways, elevator shafts, light and ventilation shafts, and all service chutes between floors shall be enclosed or protected to prevent the spread of fire and smoke, and shall be maintained in their original fire and smoke-tight condition.
- (2) Draftstopping. Any concealed space, such as a utility chase, attic, crawl space, or other vertical or horizontal opening between floors in which combustible material is exposed shall either be:
  - (a) Provided with draftstopping and automatic heat detection, or
  - (b) Provided with automatic fire sprinklers.
- (3) Fire extinguishers. Fire extinguishers may be located inside student-occupied spaces only when:
  - (a) The fire extinguisher is located adjacent to the primary exit door;
  - (b) The door remains unlocked when the facility is occupied; and
  - (c) There is posted a permanently affixed sign reading "FIRE EXTINGUISHER INSIDE."

**Exception:** Exterior signage is not required when a fire extinguisher is installed inside of every relocatable building on a school or ancillary site.

If the fire extinguisher only serves the student-occupied space or if code requirements are met, excluding the fire extinguisher in question, a sign outside the space and continual access when the facility is occupied is no longer required.

- (4) Existing on-site incinerators and waste burners shall be equipped with a wire screen stack guard and shall be used for burning Class A materials only.
- (5) All existing buildings more than 4 stories or 45 feet in height shall be equipped with automatic fire sprinkler systems.
- (6) Residential Appliances. Residential style ranges installed in home economics instructional spaces, classrooms, faculty lounges, and similar areas shall not be required to comply with the provisions for commercial cooking appliances under NFPA 96, provided all of the following requirements are met:
  - (a) The space contains only residential-type ranges with hoods vented to the outside.
  - (b) Fire extinguishers are installed in accordance with NFPA 10.
  - (c) The space containing the residential style range is not classified as an assembly.
- (7) These requirements place no limitations on the use of other residential-type appliances within the space.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022,

633.025, 1013.12, 1013.371, 1013.38 FS. History-New 11-26-06, Amended 11-4-12.

#### 69A-58.0084 Seclusion Time-Out Rooms.

- (1) Egress. Secured seclusion time-out rooms, when provided, shall be equipped with doors which allow egress at all times in the event of an emergency.
- (2) Locking devices.
  - (a) Locking devices on secured seclusion time-out rooms are permitted only when such room is in full compliance with the criteria in this rule.
  - (b) An electro-magnetic locking device is the only approved device to secure a secured seclusion time-out room. The lock shall remain engaged only when the human hand is in contact with it placing pressure on it.
    - 1. Upon release of pressure, the door shall unlock. The locking device shall be designed, and shall be operated, so that it cannot be engaged by leverage of an inanimate object or in any manner except by constant human contact.
    - 2. The push button shall be recessed from the face of the unit housing, or in some other way designed to prevent taping or wedging the button in the engaged mode.
    - 3. The device shall have an interface with the fire alarm system and shall automatically release and disengage upon activation of the fire alarm. The locking device shall automatically release and disengage in the event of power failure.
    - 4. A timer shall not be used on the locking device.
- (3) Door Requirements. The door shall have only a push panel exposed on the interior of the room. A vision panel shall be provided in the door, and it shall be no larger than 12" x 12" (144 square inches). The view panel shall consist of clear one-quarter (1/4) inch thick unbreakable plastic panel, flush with the face of the door on the inside. The view panel shall be positioned in the door to allow a staff member to continuously keep the student under observation. The view panel shall not be covered with any material.
- (4) Finishes and materials. The ceiling, floor, and walls must be free of any loose, torn or potentially hazardous materials. All surfaces must be kept smooth and free of any hooks, outlets, switches or similar items. Construction materials shall meet all applicable provisions of the Florida Fire Prevention Code and the Florida Building Code. Each secured seclusion time-out room must be identified with a permanently mounted room number.
- (5) All secured seclusion time-out rooms must have natural or mechanical ventilation.
- (6) The division and the local fire official are permitted to conduct unannounced inspections of all secured seclusion time-out rooms to ensure compliance with this rule chapter. A written record of each inspection must be made and a copy of same must be provided to the school administrator or designee.
- (7) During each unannounced inspection, the division or the local fire official is permitted to

inspect secured seclusion time-out rooms, interview staff, and review staff development activities to ensure compliance with this rule chapter.

(8) If during any firesafety inspection a secured seclusion time-out room is found in violation of this rule chapter, the board or the local fire official shall immediately report the deficiency to the division in accordance with Section 1013.12(2)(d) or 1013.12(7), F.S., and the secured seclusion time-out room shall be immediately withdrawn from use.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 11-26-06, Amended 11-4-12.

### 69A-58.009 Florida Firesafety School Evaluation System.

- (1) Any Florida school building which was initially occupied prior to January 1, 1985, is permitted to use the Florida Firesafety School Evaluation System originally dated September 19, 2000, and Amended June 28, 2001, which is located in Form DFS-K3-1456(Rev 10-02) and which is hereby incorporated by reference, in lieu of or as an alternative to the requirements of Rule 69A-58.008, F.A.C.
- (2) The Florida Firesafety School Evaluation System, Form DFS-K3-1456, may be obtained by writing to the Division of State Fire Marshal, Bureau of Fire Prevention, 200 East Gaines Street, Tallahassee, Florida 32399-0342.
- (3) The Florida Firesafety School Evaluation System must be authorized by the local fire official prior to the implementation of any of its alternative code provisions; however, a local fire official is not permitted to prohibit the use of the Florida Firesafety School Evaluation System for any building which was initially occupied prior to January 1, 1985.

"Local fire official" means the county, municipality or independent special fire control district having firesafety responsibility employing or contracting with a firesafety inspector certified pursuant to Section 633.081(2), F.S., with jurisdiction to make inspections of buildings and to enforce the firesafety codes which establish standards for design, construction, erection, alteration, repair, modification, or demolition of public or private buildings, structures, or facilities or, where the context requires, the State Fire Marshal, as referred to in Section 1013.12(3)(b), F.S. (See Rule 69A-58.003(12).)

(4) For buildings occupied after January 1, 1985, boards and fire officials may use the equivalency provisions of Section 1.4 of NFPA 101, the edition as adopted in Rule 69A-3.012, F.A.C.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.009, Amended 11-26-06, 11-4-12.

#### 69A-58.010 Other Applicable Codes and Standards.

Except as otherwise provided in this rule chapter, the codes and standards adopted in Rules 69A-60.003, 69A-60.004 and 69A-60.005, F.A.C., which are not in conflict with any provision of this rule chapter are applicable to all buildings and structures to which this rule chapter is applicable.

Rulemaking Authority 633.01(1), (7), 1013.12(1) FS. Law Implemented 633.01(7), 633.022, 633.025, 1013.12, 1013.371, 1013.38 FS. History–New 2-18-03, Formerly 4A-58.010.

# **Appendix**

Handbook for the State Requirements for Existing Educational Facilities.

This appendix is formatted as a quick reference guide summarizing code-related issues through the use of tables and example diagram drawings and illustrations. The handbook is intended to be a general guideline and should be used for reference purposes only.

# **Table of Contents**

## **Appendix**

Abbreviations	A-4
Symbol Legend	A-5
Site Requirements/Landscape	A-6
Site Requirements/Fencing	A-8
Site Requirements	A-12
Site Requirements/Minimum Parking Requirements	A-16
Site Requirements/Lighting	A-18
Site Requirements/Playground Safety	A-20
Building Materials	A-28
Insulation and Moisture Protection	A-30
Doors and Windows	A-34
Acceptable Lockset Functions and Hardware	A-36
Door Fire-Rating Labels	A-38
Safety and Fire-Rated Glazing	A-40
Finishes	A-44
Stairs	A-46
Handrails at Stairs	A-48
Interior Stairs	A-50
Equipment	A-52
Auditorium Seating	A-54
Auditorium Aisle Widths	A-56
Grandstands and Bleachers	A-58
Kitchens and Food Service	A-60
Aisles Serving Seating at Tables	A-62
Laboratories, Shops and Library/Media Centers	A-64
Open Plan Classrooms	A-66

Shade and Green Houses	A-68
Platforms and Stages	A-70
Regular Stage	A-72
Legitimate Stage	A-74
Relocatables for Classroom Use	A-76
Conveying Systems	A-80
Mechanical	A-82
Toilet Rooms	A-84
Electrical	A-86
Number of Required Means of Egress	A-88
Separation of Means of Egress	A-90
Travel Distance	A-92
Dead-End Corridors	A-94
Emergency Rescue Openings	A-96
Fire Alarm	Δ-98

Florida School Evaluation System
Fire Safety Evaluation System Instructions and Worksheets

Office of Educational Facilities State Requirements for Educational Facilities – section 5 Application Matrix

#### **Abbreviations**

ADA Americans with Disabilities Act

AHERA Asbestos Hazard Emergency Response Act

AHJ Authority Having Jurisdiction (either fire or building)

CFR Code of Federal Regulations

**CCTV** Closed Circuit Television

CPSC Consumer Product Safety Commission

DBPR Department of Business and Professional Regulations

DOE Department of Education

DOH Department of Health

**EPA** Environmental Protection Agency

FAC Florida Administrative Code

FACBC Florida Accessibility Code Building Construction

FBC Florida Building Code

FD Fire Department

FDEP Florida Department of Environmental Protection

FDOT Florida Department of Transportation

FFPC Florida Fire Prevention Code

FISH Florida Inventory of School Houses

IBC International Building Code

MOE Means of Egress

NFPA National Fire Protection Association

OSHA Occupational Safety And Health Administration

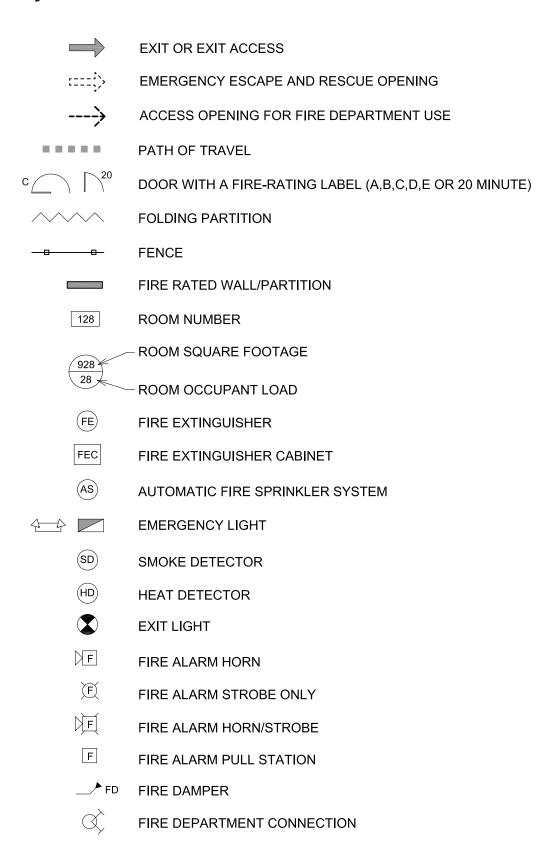
PPSH Public Playground Safety Handbook

SFMR State Fire Marshal Rule

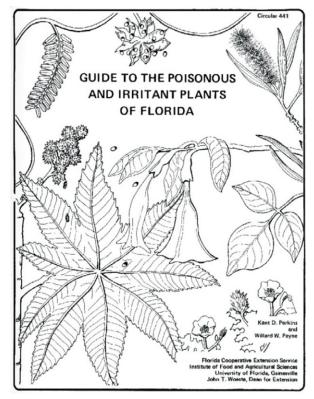
SREF State Requirements for Educational Facilities

UBC Uniform Building Code

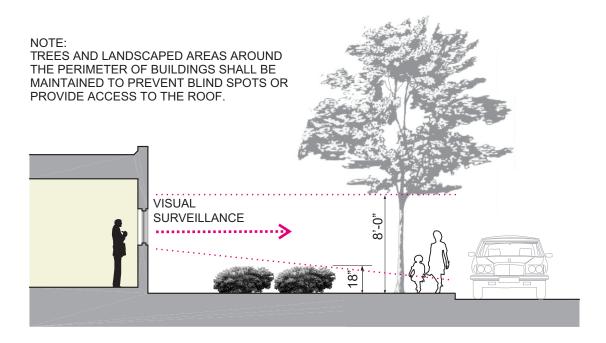
# **Symbols**



Site Requirements/Landscape				
Landscape	Poisonous, Toxic, and Hazardous Plants  A list of poisonous, toxic, and hazardous plants can be found in "Guide to the Poisonous and Irritant Plants of Florida" by Kent D. Perkins and Willard W. Payne published by the Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences at the University of Florida. This publication is available on line through the University of Florida Digital Collections at http://ufdc.ufl.edu/UF00000155/00001/1j.  Site Surveillance  Trees and landscaped areas around the perimeter of buildings shall be maintained to prevent blind spots or provide access to the roof. Trees, where provided, shall be healthy, disease-free, and trimmed of dead, diseased, and broken branches.  Washouts  Washouts  Washouts around buildings and entrance slabs shall be filled and stabilized to remove hazardous conditions and to prevent any further washout damage.	SREF 5(2)(a)2 SREF 5(2)(a)5 SREF 5(2)(a)9		



Guide to the Poisonous and Irritant Plants of Florida http://ufdc. ufl.edu/U F00000155/0000 1/1 j



(a) Site Surveillance

WASHOUTS AROUND BUILDINGS AND ENTRANCE SLABS SHALL BE FILLED AND STABILIZED TO REMOVE HAZARDOUS CONDITIONS AND TO PREVENT ANY FURTHER WASHOUT DAMAGE.





(b) Hazardous Site Conditions - Washouts around Buildings

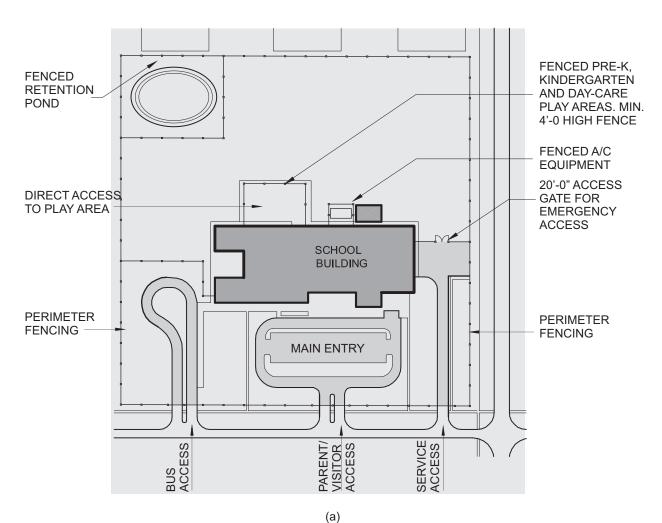
### SITE REQUIREMENTS/LANDSCAPE

Site Requirements/Fencing				
	Required Locations	Reference		
	Kindergarten through grade 12 facilities:  Exposed mechanical, plumbing, gas, or electrical equipment located on ground level.			
Fencing	All child-care and kindergarten play areas.			
	Kindergarten through grade 5 facilities:  Special hazards as identified by the authority have jurisdiction including:			
	Retention ponds whose permanent water depth or whose water depth over a 24-hour period exceeds 1 foot.  Deep drainage ditches.			
	Canals. Highways. Play fields adjacent to roadways.	SREF 5(2)(d)		
	Materials  Materials which are non-flammable, safe, durable, and low maintenance, provide structural integrity, strength and aesthetics appropriate for the intended location.			
	Prohibited materials Non-agricultural educational plants.  Razor wire, barbed wire and electrically charged systems.			
	Height  Shall be reviewd with local zoning regulations. Access shall be provided for maintenance machinery.			

#### NOTES:

Padlocks used for fencing must include a master key located within a Knox-Box Rapid Entry System for emergency vehicular access in accordance with Florida Fire Prevention Code NFPA 1 Chapter 16. As per FFPC Section 16.3.4.3-4, when access to or within a structure or area is unduly difficult because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the authority having jurisdiction shall be permitted to require a key box to be installed in an accessible location. The key box shall be an approved type and shall contain keys to gain access as required by the AHJ.

See Site Requirements/Playground Safety for additional code-related issues.



Example perimeter fencing with limited access points



(b) Example perimeter fencing with limited access points

#### SITE REQUIREMENTS/FENCING

ACCESS

20' MINIMUM WIDTH **EMERGENCY VEHICULAR** ACCESS GATE STABILIZED SURFACE FOR EMERGENCY VEHICULAR DRIVEWAYS SHALL NOT ENCIRCLE SCHOOL PLANT

(c) 20' wide emergency access gate

#### EQUIPMENT SHALL BE FENCED WITH A LOCKED GATE FOR AUTHORIZED PERSONNEL ACCESS



(d) Required fenced equipment - gas fueling tank



(e) Required fenced equipment - chiller tower

### SITE REQUIREMENTS/FENCING



(f) Required fenced equipment

THE USE OF BARBED WIRE IS PROHIBITED IN ALL NON-AGRICULTURAL EDUCATIONAL PLANTS. BARBED WIRE IS PERMITTED IN AGRICULTURAL PLOTS AND OTHER ANCILLARY SITES NOT ADJACENT TO A SCHOOL SITE.



(g) Barbed wire fencing



(h)
Chain-link fence with turned over barb

# SITE REQUIREMENTS/FENCING

Site Requirements			
	Required Locations	Reference	
Paving	Walks, roads, drives, and parking areas on educational and ancillary sites.  Materials  Roads, drives, and parking areas shall be in compliance with Florida Department of Transportation (FDOT) road specifications and striped in compliance with FDOT paint specifications.  All paved areas shall have positive drainage.	SREF 5(2)(f)	
Drainage	Soil, grass, and planting beds shall provide positive drainage away from sidewalks.  Max. 3% gradient slope for a minimum distance of 5 feet from the edge of the sidewalk.  The location of all drains, grates, drop inlets, catch basins, and other drainage elements and curb cuts shall be out of the main flow of pedestrian traffic.	SREF 5(2)(a)8	
Accessible Walks and Bridges	Required Locations  Accessible walks shall connect building entrance(s) to all: Accessible parking. Public transportation stops. Public streets. Sidewalks. Loading and drop-off zones. Other facilities within the site as required by the accessibility standards.		
Covered Walks	Required Locations  All buildings in Kindergarten through grade 12 educational facilities shall be connected by paved walks and accessible under continuous roof cover.  New permanent relocatable classroom buildings shall be connected to permanent buildings by covered paved walks where applicable.  Roofs for covered walks shall extend one foot beyond each side of the designated walkway width.  Gutters or other water funneling devices, including diverters, shall prevent storm water from pouring onto or draining across walks.	SREF 5(2)(f)7	



(a) Example covered walkway

# NOTE: RELOCATABLES USED AS CLASSROOMS OR SPACES INTENDED FOR STUDENT OCCUPANCY, INCLUDING "MODULAR SCHOOLS," WHICH HAVE BEEN IN USE AT A SCHOOL SITE FOR FOUR YEARS OR MORE SHALL BE CONNECTED TO THE CORE FACILITIES BY COVERED

ACCESSIBLE WALKWAYS.



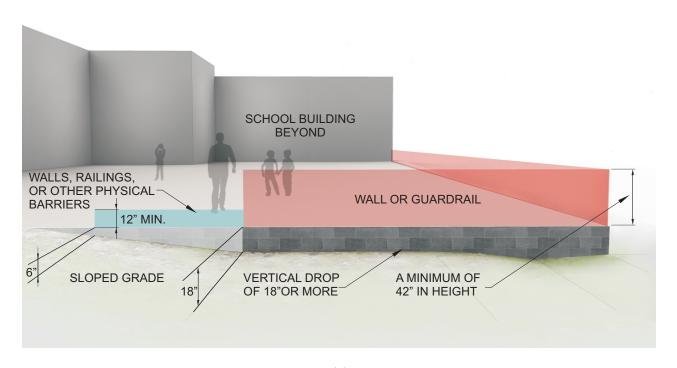
(b) Covered walks MARKED PEDESTRIAN CROSSWALKS, WHEN REQUIRED, SHALL BE MAINTAINED TO MEET FDOT STANDARDS.



(c)
Marked pedestrian crosswalk

# SITE REQUIREMENTS

	Site Requirements	
	Required Locations	Reference
Protection for Vertical Drops	Any vertical drop between joining or abutting surfaces of more than 6 inches but less than 18 inches in height:  Protected by walls, railings, or other physical barriers which are at least a minimum 12 inches in height.  Vertical drop of 18 inches or more:  Protected by a wall or guardrail a minimum of 42 inches in height.	SREF 5(2)(f)7e
	Primary and Emergency access required.	
	On-site driveways shall be restricted from completely encircling the school plant.	
Roads and Streets	Vehicular and pedestrian traffic shall be prevented from crossing each other on the site, or appropriate safety devices shall be provided where vehicular and pedestrian traffic cross.	SREF 5(2)(f)8
	Bus driveways and parent pick-up areas shall be separated from each other, or appropriate safety devices shall be provided where bus drives and parent pick-up areas are not separated.	
	Dimensional Requirements  Minimum width shall be 24 feet for two-lane traffic.  Turning Radius:	
	Educational and ancillary sites and for turning off public access streets.	
Bus Drives	One-way traffic: 60 feet minimum measured to the outside curb or edge of the traffic lane.	SREF 5(2)(f)9
	Two-way traffic: 60 feet minimum measured to the centerline of the road.	
	Bus drives shall be designed so that buses do not have to back up.	



(a)
Protection for vertical drops from 6" to 18" and 18" or more.



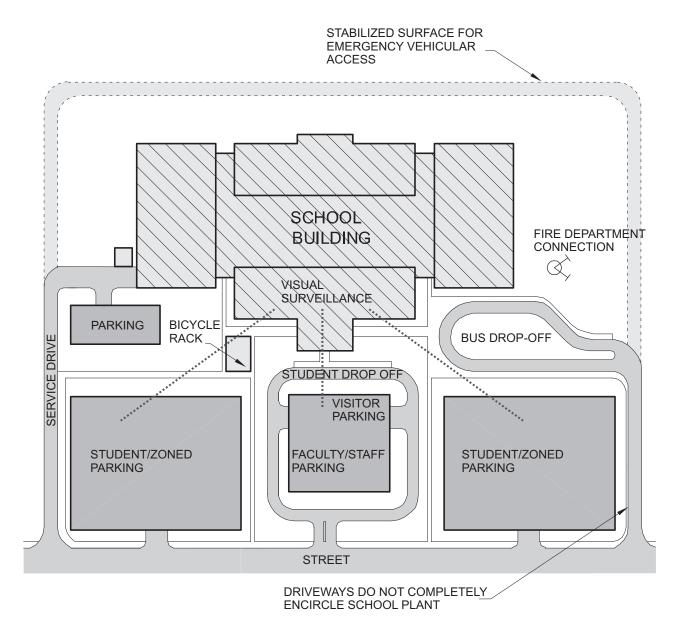
(b) Maintain protection for vertical drops

# SITE REQUIREMENTS

Site Requirements/Minimum Parking Requirements			
Group	Parking Spaces Required	Reference	
Faculty & Staff	1 space for each member.		
Visitors	Appropriate spaces for facility.		
Community Clinics	10 spaces including 1 accessible space.	SREF 5(2) (f)10b	
High Schools	1 space for every 10 students above grade 10.		
Vocational Schools	1 space for every 2 students.		
Florida Colleges	1 space for every 2 students.		
Accessible Parking	The total number of accessible spaces shall be provided as required by Chapter 11, 2007 Florida Building Code, Building, or the 2012 Florida Accessibility Code for Building Construction in Rule 9N-4.002, FAC.	SREF 5(2) (f)10c	
Overflow Parking Areas	May utilize alternative parking surfaces that facilitate water absorption rather than runoff when approved for use by the review authority. This requirement usually applies to a percentage of the parking spaces, not all of them.		

Vehicle parking areas shall comply with minimum parking space requirements SREF 5(2)(f)10.

Exception: Accessible parking spaces shall be hard-surfaced.



(a) Site Plan / Parking Schematic

#### SITE REQUIREMENTS/MINIMUM PARKING REQUIREMENTS

Site Requirements/Lighting				
	Required Locations:	Reference		
Security	Auto, bus, and service drives	s and loading areas.		
Lighting Educational	Parking areas. Athletic complexes.			
and Ancillary	Building perimeter.		SREF 5(2)(g)1	
Facilities	Covered and connecter walks between buildings and between			
	buildings and parking.			
	Illumination	n Requirements		
	Location	Average Maintained Foot-candle*		
	Parking areas.	1		
Parking Areas	Covered and connector walks.	1		
	Parking entrances/exits.	2	SREF 5(2)(g)3 SREF 5(2)(g)5	
	Location	Minimum Foot-candle*		
Building	Building entrances.	5		
Exteriors	Building surrounds.	1		

Parking area lighting standards shall be designed to withstand appropriate wind loads.

Exterior lighting shall be shielded from adjacent properties.

Exterior lighting shall comply with the energy efficiency requirements of Florida Insitute of Sustainable Energy 13-415 as appropriate.

<sup>\*</sup> Parking areas shall be illuminated to an average maintained horizontal foot-candle measured at the surface.

<sup>\*\*</sup> Building exteriors, perimeters, and entrances may be illuminated to the minimum number of foot-candles, measured at the surface with a suggested uniformity ratio of 2:1.



(a) Example sports field lighting with light shields



(b) Example lighting parking area



(c) Building exterior lighting - building entrance



(d) Building exterior lighting - building entrance

# SITE REQUIREMENTS/LIGHTING

Site Requirements/Playground Safety				
	Required Locations	Reference		
	Kindergarten through grade 12 facilities:  Exposed mechanical, plumbing, gas, or electrical equipment located on ground level.  All shills care and kindergarten play grade.			
	All child-care and kindergarten play areas.  Pre-kindergarten, kindergarten, or day-care play areas are fenced, separated from other play areas, and have direct access to and from their related classrooms.  Kindergarten through grade 5 facilities: Special hazards as identified by the authority having jurisdiction including: Retention ponds whose permanent water depth or whose water depth over a 24-hour period exceeds 1 foot. Deep drainage ditches. Canals.			
Fencing	Highways. Play fields adjacent to roadways.  Additional protection can be provided by means of a low blockade such as a fence or hedge around the perimeter of the swing area. The blockade should not be an obstacle within the use zone of a swing structure or hamper supervision by blocking visibility.	SREF 5(2)(k) SREF 5(2)(d)		
	Materials  Materials which are non-flammable, safe, durable, and low maintenance, provide structural integrity, strength and aesthetics appropriate for the intended location.			
	Prohibited materials Non-agricultural educational plants. Razor wire, barbed wire and electrically charged systems.			
	Height Shall be reviewed with local zoning regulations. Access shall be provided for maintenance machinery and emergency vehicles			
(Continue to next page) *CPSC refers to the Public Playground Safety Handbook 2011.				



(a)
Pre-kindergarten, kindergarten, or day-care play areas are fenced, separated from other play areas, and have direct access to and from their related classrooms.

EQUIPMENT SHALL BE FENCED WITH A LOCKED GATE FOR AUTHORIZED PERSONNEL ACCESS.



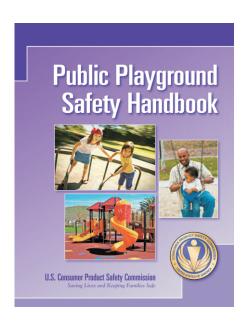


(b)
Example fencing for exposed mechanical equipment located at ground level

Site Requirements/Playground Safety (Continued)			
	Appropriate Surfacing:	Reference	
Surface	Any material tested to ASTM F1292, including unitary surfaces, engineered wood fiber, etc. Pea gravel. Sand. Shredded/recycled rubber mulch. Wood mulch (not CCA-treated). Wood chips.  The recommendations for protective surfacing do not apply to equipment that requires a child to be standing or sitting at ground level.  Covered play areas, when provided, must have positive drainage away from the center of the floor.  Finishes, treatments, and preservatives should be selected carefully so that they do not present a health hazard to users.	SREF 5(2)(k)5 CPSC 2.4.1* CPSC 2.4.2* CPSC 2.5.1*	
Access	Play areas and athletic fields where fencing is provided shall have at least one (1) gate to the exterior large enough to accommodate pedestrian egress and one (1) gate to the exterior large enough to accommodate service equipment and emergency vehicle access.  Direct access from the facility is provided to play areas and athletic fields without crossing roads, traffic lanes, drives, or parking lots, or appropriate safety devices are provided where access crosses parking or drives.  Accessibility is provided to playgrounds, equipment, athletic fields, and related facilities.	SREF 5(2)(d)1 SREF 5(2)(k)3 SREF 5(2)(k)8	
Related Faciliti			
Facilities	Toilets, concessions, storage, shower and locker rooms, bleachers, press boxes, observation platforms, scoreboards, and dugouts, when provided, have been inspected under the appropriate area of this section.	SREF 5(2)(k)7	
(Continue to next page) *CPSC refers to the Public Playground Safety Handbook 2011.			

Table 2. Minimum compressed loose-fill surfacing depths			
Inches	Of (Loose-Fill Material)	Protects to	Fall Height (feet)
6*	Shredded/recycled rubber		10
9	Sand		4
9	Pea Gravel		5
9	Wood mulch (non-CCA)		7
9	Wood chips		10
* Shredded/recycled rubber loose-fill surfacing does not compress in the same manner as other loose-fill materials. However, care should be taken to maintain a constant depth as displacement may still occur.			

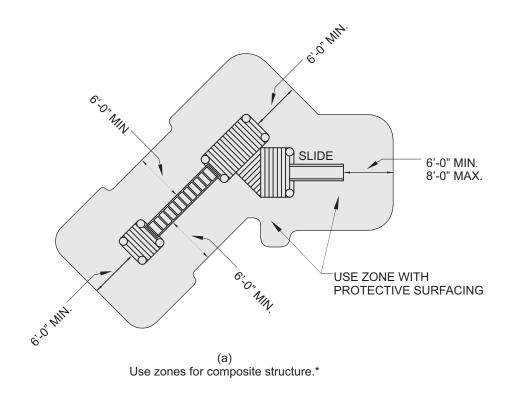
(a) Appropriate playground surfacing materials\*

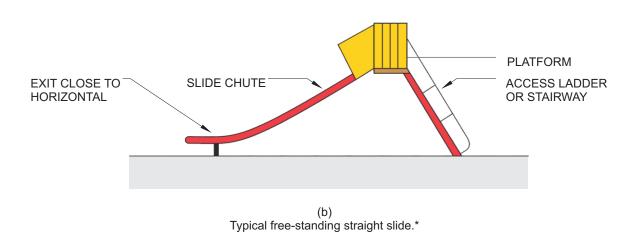


(b) Public Playground Safety Handbook (CPSC)\*

<sup>\*</sup> Images from the *Public Playground Safety Handbook*. http://www.cpsc.gov/cpscpub/pubs/325.pdf

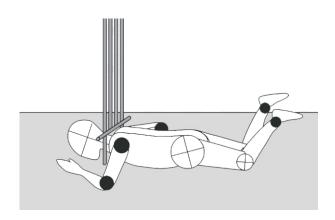
Site Requirements/Playground Safety (Continued)				
	Diayarayada and Athletia Fayinment Diayarayada ahali ha	Reference		
	Playgrounds and Athletic Equipment. Playgrounds shall be constructed and maintained to permit maximum utilization of sites with elimination of sanitary and health hazards including mudholes, fragments of glass, stone and similar obstructions.			
	Fixed playground equipment shall be anchored with substantial foundations so maximum safety is obtained.			
Playground Equipment	Athletic and recreational equipment and facilities must be kept clean and in a safe condition. Fences and equipment shall have no jagged or sharp projections.			
	Cushioning materials such as mats, wood chips, or sand shall be used under climbing equipment, slides, and swings.	SREF 5.2(k)		
	Athletic and playground equipment must be structurally sound, maintained firm and stable, vermin-proof, free of pockets or crevices where water will collect or vermin and pets may hide, and free from jagged or sharp projections, edges, or corners.	CPSC 2.2.6* CPSC 2.5.1* CPSC 5.3.10*		
	The ground under playground equipment is resilient material, either unitary or loose-laid, and is maintained to prevent injury.			
	Signs and/or labels posted in the playground area or on the equipment should give some guidance to supervisors as to the age appropriateness of the equipment.			
	The fall height of a piece of playground equipment is the distance between the highest designated playing surface and the protective surface beneath it. The use zone should extend a minimum of 6 feet in all directions from the perimeter of the equipment.			
*CPSC refers to the Public Playground Safety Handbook 2011.				



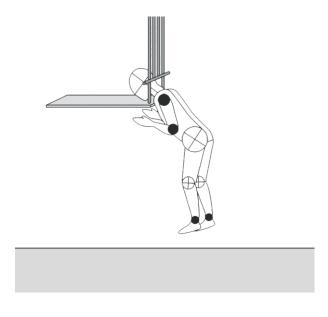


<sup>\*</sup> Images from the *Public Playground Safety Handbook*. <u>http://www.cpsc.gov/cpscpub/pubs/325.pdf</u>

Site Requirements/Playground Safety (Continued)				
Hazards	An opening may present an entrapment hazard if the distance between any interior opposing surfaces is greater than 3.5 inches and less than 9 inches. If one dimension of an opening is within this potentially hazardous range, all dimensions of the opening should be considered together to fully evaluate the possibility of entrapment. These recommendations apply to all playground equipment.	Reference		
	Rail Spacing:  Small Torso Template:  The dimensions of this template are based on the size of the torso of the smallest user at risk. If an opening is too small to admit the template, it is also too small to permit feet first entry by a child. Because children's heads are larger than their torsos, an opening that does not admit the small torso template will also prevent head first entry into an opening by a child.	CPSC B.2.4.1* CPSC B.2.5*		
	Large Head Template:  The dimensions of this template are based on the largest dimension on the head of the largest child at risk. If an opening is large enough to permit free passage of the template, it is large enough to permit free passage of the head of the largest child at risk in any orientation. Openings large enough to permit free passage of the large head template will not entrap the chest of the largest child at risk.			
*CPSC refers to the Public Playground Safety Handbook 2011.				



(a)
Ground-Bounded: Not subject to entrapment recommendations.\*



(b) High ntrapment.\*

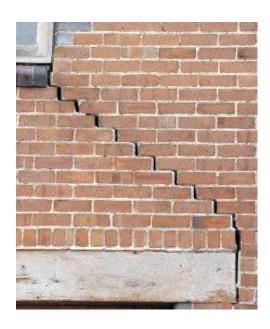
<sup>\*</sup> Images from the *Public Playground Safety Handbook*. <u>http://www.cpsc.gov/cpscpub/pubs/325.pdf</u>

Building Materials				
Concrete	Structural Members. Concrete structural members, foundations, retaining walls, and framing shall be maintained in a safe condition and free from hazards, including cracks, spalling, and exposed reinforcing steel.**  Concrete Poles and Furniture. Light and flag poles, benches, tables, planters, etc., where provided, shall be maintained in a safe condition and free from hazards.  Walks and Drives. Concrete walks, drives, loading docks, swimming pool decks, parking areas, etc., where provided, shall be maintained in a safe condition and free from hazards.  Concrete Parking Structures. Concrete parking structures, covered walkways, etc., where provided, shall be maintained in a safe condition and free from hazards	Reference  SREF 5(3)  NFPA, Section 10.1.4		
Masonry	Exposed masonry shall meet the minimum casualty safety and sanitation requirements for masonry veneers, framing, benches, tables, etc., including relocatables, as applicable. Masonry veneers, walls, retaining walls, and framing, where provided, shall be maintained in a safe condition and free from hazards, including cracks, spalling, and exposed reinforcing steel.	SREF 5(4)		
Metal	Structural Steel. Structural steel members and light gauge metal framing for buildings shall be maintained in a safe condition and free from hazards, including rust and loose fastenings.  Poles and Furniture. Light and flag poles, benches, tables, etc., shall be maintained in a safe condition and free from hazards, including rust and loose fastenings.  Parking Structures. Steel parking structures, covered walkways, etc., where provided, shall be maintained in a safe condition and free from hazards.	SREF 5(5)		
Wood	Structural Members. Wood columns, beams, joists, trusses, heavy timber construction, and other structural members shall be maintained in a safe condition and free from hazards, including loose fastenings, wood rot, chips, splits, cracks, and wood-destroying insects.  Chemical Treatment. Wood in contact with concrete or masonry, or within eight inches of soil shall be protected against decay and termites by chemical treatment, termite shields, etc.  Built-Ins and Casework. Built-ins and casework, including plastic laminates, where provided, shall be free of sharp corners, splinters, or any construction feature, such as protruding hardware, that would be hazardous to occupants and users.  Wood Floors. Wood floors, where provided, shall be free of loose or broken boards, holes, uneven projections, protruding nails, splinters, and other tripping hazards.	SREF 5(6)		

<sup>\*\*</sup>Structural members must be monitored for hazards such as cracks, spalling and exposed reinforced steel. Where structural elements have visible damage, the AHJ shall be permitted to require a technical analysis prepared in accordance with NFPA 1 10.1.4.1 to determine if repairs are necessary to restore structural integrity. When the technical analysis recommends repairs to the structure, such repairs shall be made. (See NFPA 1 section 10.1.4).



(a) Material Hazard - Spalling concrete with exposed rebar



(b) Material Hazard - Cracks in masonry veneer

STRUCTURAL MEMBERS SHALL BE MAINTAINED IN A SAFE CONDITION AND FREE FROM HAZARDS.



(c) Material Hazard - Damaged steel beam connection



(d) Material Hazard - Wood rot

# **BUILDING MATERIALS**

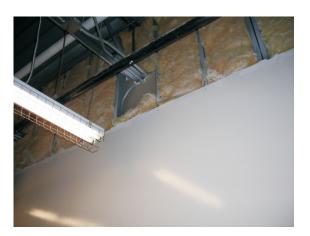
Insulation and Moisture Protection			
Thermal Insulation	Thermal insulation, where provided, shall be visible for inspection in such spaces as attics, crawl spaces, duct work, mechanical rooms, etc.; protected from the weather; and held securely in place.	Reference SREF 5(7)(a)	
Vapor Barriers	Vapor barriers, where provided, shall be visible for inspection in such spaces as attics, crawl spaces, mechanical spaces, insulated ducts, chilled water lines, etc.; located on the exterior side of thermal insulation; protected from the weather; and held securely in place.	SREF 5(7)(b)	
	Roofing systems, including flashing, gutters, downspouts, roof drains, membrane, roof penetrations, etc., where provided, shall be watertight, held securely in place, free of debris, and maintained in good condition.		
Roofing	<ol> <li>Positive drainage shall be provided for all portions of the finished roof surface to the edge of the roof or to roof drains.</li> <li>Roofs shall be maintained so that water does not pond.</li> <li>Accessories such as flashing, gravel stops, drip edging, expansion joints, gutters, downspouts, scuppers, and roof drains, where provided, shall be maintained in a good condition.</li> <li>Structural members, including decks, beams, fascia, etc., shall be in good repair and structurally sound.</li> </ol>	SREF 5(7)(c)	





THERMAL INSULATION AND VAPOR BARRIERS, WHERE REQUIRED, SHALL BE VISIBLE FOR INSPECTION.





(a) Thermal insulation and vapor barriers

## **INSULATION AND MOISTURE PROTECTION**

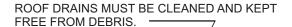


(a)
Roofing Accessories - Skylight with fall protection and security grille



(b) Roofing Accessories - lockable type roof hatch

ROOFING COMPONENTS AND ACCESSORIES SHALL BE MAINTAINED IN A SAFE CONDITION AND FREE FROM HAZARDS.



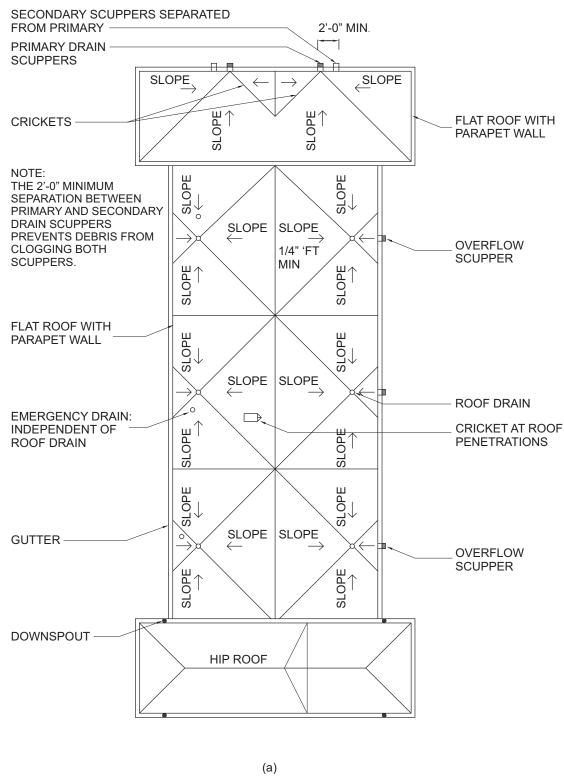






 $\mbox{(c)}$  Downspouts, gutters and roof drains should be maintained in good condition.

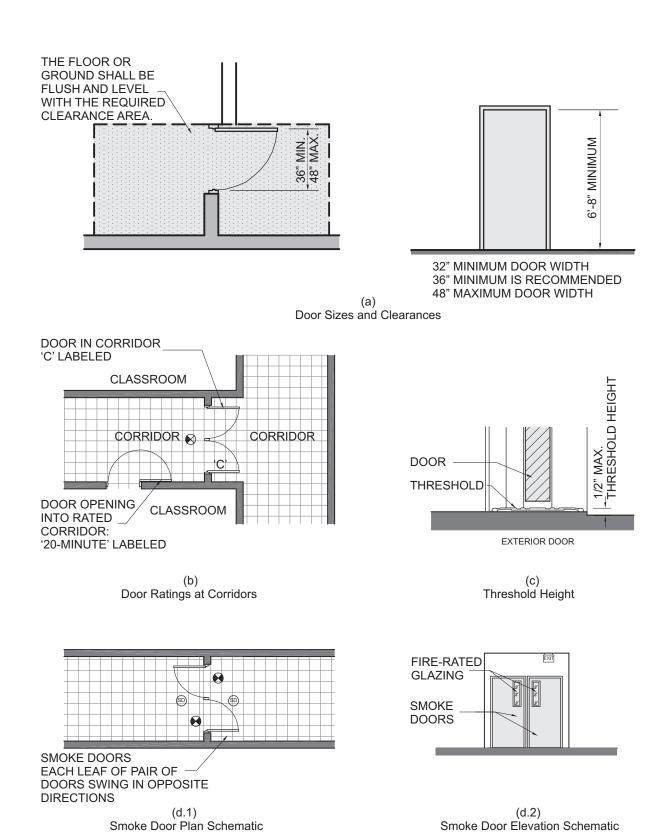
#### **INSULATION AND MOISTURE PROTECTION**



Schematic Roofing Plan

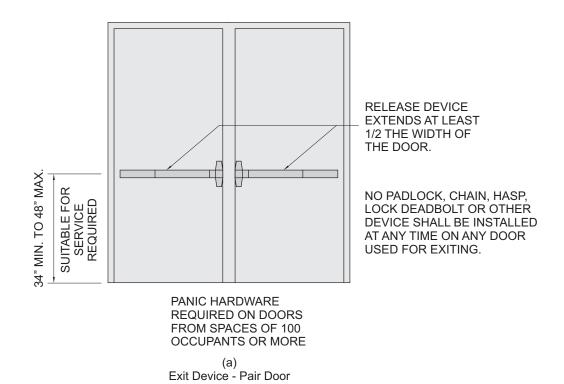
#### **INSULATION AND MOISTURE PROTECTION**

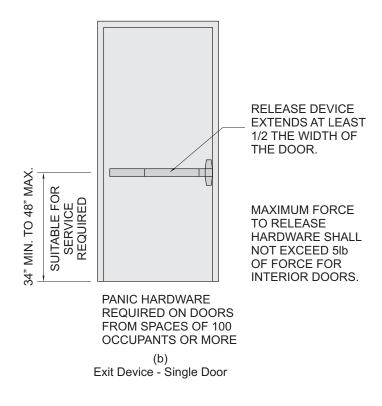
Doors and Windows			
	Doors and Windows.	Reference	
	Doors and windows shall be maintained in an operable, safe and secure condition at all times and free of splinters, sharp projections, broken glass, broken hardware, etc. Glass in doors and windows shall meet applicable glazing requirements found in SREF Section 5(8)(d).		
Operation	Side-Hinged. Swing in the direction of egress if occupant load of area being served is 6 or greater.  Operable from inside by a single operation without the use of tools.  Doors for steam rooms, locker rooms, shower rooms, individual and group toilet rooms shall swing in the direction of exit travel, and shall always be operable for exit from the inside.	SREF 5(8)(a) SREF 5(8)(b)	
Clearances	Maneuvering clearances at doors shall comply with Figure 404.2.4.1, Accessibility Code Requirements.  The floor or ground area within the required maneuvering clearance area shall be flush and level.  A minimum 5 feet by 5 feet level platform on each side of a single door is recommended.	SREF 5(8)(b)	
Size	Minimum width 32 inches (36 inches doors recommended).  Maximum width 48 inches.  Minimum height 6 feet 8 inches.		
Threshold	Maximum height 1/2 inch. Interior doors shall have a flat threshold. Flat threshold at class 'A' fire-rated doors with carpet.	SREF 5(8)(c)5	
Required Fire	Doors opening into 1 hour fire-rated corridors shall be minimum '20 Minute' labeled assemblies.  Doors in corridors shall be 'C' labeled assemblies.  Comply with NFPA 80 and NFPA 252 or NFPA 257.  Self-closing.  Positive latching.		
Rating	Class 'C' fire rated assembly View Panels: Clear fire-rated glazing in steel frames. Maximum area of 1296 square inches. Bottom of view panel 30 inches above finished floor. Top of view panel 72 inches above finished floor.		
Smokestop Doors	Each leaf of a pair of doors swing in opposite direction.  1/8 inch clearance at frame.  Grilles or louvers prohibited.  Center mullions prohibited.  No locking devices.  Smoke detector and illuminated exit signs on each side.  Smokestop barrier:  1 hour fire rated except in sprinklered buildings.  Continuous from floor to deck above.	Rule 69A-58.0081, F.A.C.	



#### **DOORS AND WINDOWS**

Acceptable Lockset Functions and Hardware				
Location	Function	Operation	Reference	
Occupancy of 50 or More	Panic Release	For Accessibility Code Requirements, 5 pounds of pressure maximum for interior and 8.5 pounds of pressure for exterior.		
Fire Doors		Positive latching device		
Smoke Doors	No latching device	None		
Classrooms	Classroom security	Latch locked or unlocked by key from inside or outside room, inside always free for exiting.	SREF 5(8)(c)1	
Offices	Classroom security	Latch locked or unlocked by key from inside or outside room, inside always free for exiting.		
Single Use Toilet Rooms Pre-K through Grade 3	Bath privacy	Push button locking from inside. Can be opened from the outside without the use of special tools or key. Turning inside lever or shutting door releases locking button, preventing lockout.		
Other Single Use Toilet Rooms	Bath privacy	Push button locking from inside. Readily opened from the inside. Turning inside lever or shutting door releases locking button, preventing lockout.		
Group Toilet Rooms	Classroom security or classroom deadbolt lock	Latch locked or unlocked by key from inside or outside room, inside always free for exiting.		
Storerooms Mechanical Rooms Electrical Rooms	Storeroom	Outside knob fixed. Entrance by key only. Inside always free for exiting.		
Time-Out Rooms	Electro-magnetic locking device may be used.	Push button engagement mounted outside time-out room door adjacent to door frame.	Rule 69A- 58.0084(2), F.A.C.	
		Hardware		
General	Doors and gates shall be equipped with hardware that will allow egress at all times without assistance.  Projecting hardware on doors swinging into a means of egress is not considered an obstruction if the door opens flat against the wall.		SREF 5(8)(c)2	
	No padlock, chain, installed at any time  Doors which by co wind exposure shal and uncontrolled or			



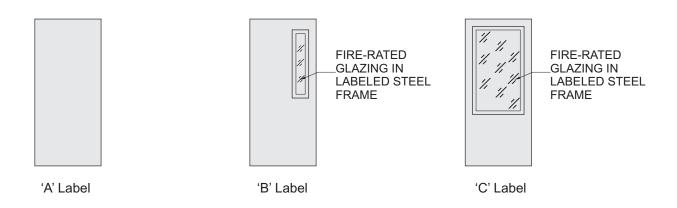


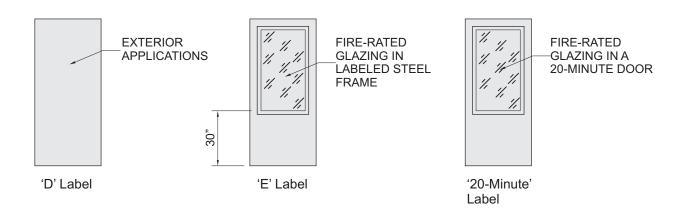
#### **DOOR HARDWARE**

Door Fire-Rating Labels					
Label	Fire Resistance	Limiting Size of Fire-Rated Glazing	Example Use / Location	Reference	
A - Label	3 - Hour	No glazing allowed.	Doors or openings in walls separating buildings or dividing a single building into fire areas.		
B - Label	1 - Hour and 1 1/2 - Hour	Limited size of	Doors or openings in enclosures of vertical communication through buildings (stairs, elevators, etc.) Doors in fire-rated corridors.	FFPC NFPA 101 8.3.3	
C - Label	3/4 - Hour	fire rated-glazing shall be installed	Doors that open into fire-rated corridors.		
D - Label	1 1/2 - Hour	and complying with walls which are subjective	Doors or openings in exterior walls which are subject to severe fire exposure from outside the building.		
E - Label	3/4 - Hour		Doors or openings in exterior walls which are subject to moderate or light fire exposure from outside the building.		
20 minute	20 - minute	Limited to the amount of glass tested in a door.	Doors or openings in walls which require a fire-resistance rating for smoke barriers and exit access corridors.		

Fire protection ratings for products intended to comply with the above shall be as determined and reported by a nationally recognized testing agency in accordance with NFPA 252 or NFPA 257. Fire door assemblies shall be installed in accordance with NFPA 80.

All such products shall have an approved label.



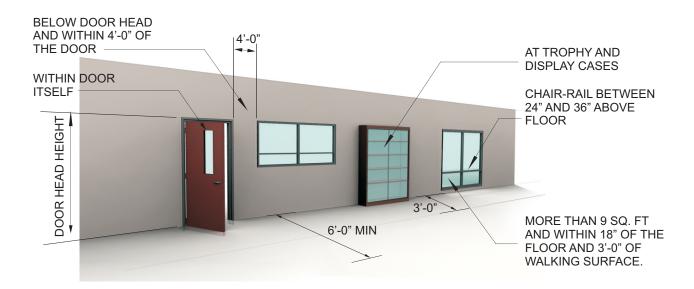


#### NOTE:

FIRE-RESISTANCE GLAZING SHALL BE INSTALLED IN ACCORDANCE WITH AND COMPLYING WITH NFPA 80.

#### **DOOR FIRE RATING LABELS**

Safety and Fire-Rated Glazing				
	Individual glazed areas including glass mirrors in hazardous locations	Reference		
Hazardous Locations	shall pass the test requirements of CPSC 16-CRF, Part 1201.  Glazing in hazardous locations shall be tempered glass, safety glass, safety plastic or in fire-rated assemblies impact-resistant fire-rated glass.			
	Specific hazardous locations include: Glazing in swinging doors. Enclosures of whirlpools, saunas, steam rooms, locker rooms, and showers. Display and trophy cases, casework. Full length mirrors subject to human contact. Glazed panels in fire extinguisher, fire hose and fire blanket cabinets.	SREF 5(8)(d)1		
All Panels and Storefronts	Glazed panels within 48 inches of a door shall be tempered glass, safety glass, or in fire-rated assemblies impact-resistant fire-rated glass, excluding transoms or vertical panels above 6 feet, 8 inches.  Large glass panels shall be subdivided by a built-in horizontal member or a permanent chair rail not less than 1 1/2 inches in width, located between 24 and 36 inches above the floor.  All glazed panels beginning 18 inches or less from the floor, greater than 9 sq. ft. in area, with a walking surface within 36 inches of the panel, shall be tempered or safety glass.  All storefronts shall use tempered or safety glass for all glazing below door head height.	SREF 5(8)(d)2		
Fire-Rated Glazing	Fire-rated assemblies shall display a permanent stamp, label, or mark identifying the product and fire rating.  Fire-protection-rated glazing shall be installed in accordance with and complying with the size limitations set forth in NFPA 80.  3/4-hour glass block assemblies shall be labeled to conform to NFPA 257 or UL 9.  1-hour and 1/2-hour walls/pjartitions, 120 square feet. maximum. Maximum dimension, 12 by 10 feet.  The aggregate area of glazing in fire doors, fire windows, side lights and transoms in 1-hour fire resistant partitions shall not exceed 25 percent of the area of a wall separating a room or space from a corridor.	FFPC NFPA 101 8.3.3		



# NOTE:

IN LOCATIONS WHERE IMPACT-SAFETY GLASS IS REQUIRED AND LOCATION IS ALSO IN FIRE-RATED LOCATION, THEN GLASS SHALL BE RATED FOR BOTH IMPACT-SAFETY AND FIRE-SAFETY.

(a) Impact-Safety Glass Locations

#### SAFETY AND FIRE-RATED GLAZING

# UNDERSTANDING IBC LABEL REQUIREMENTS FOR FIRE-RATED GLASS

# **KEY TERMS & SAMPLE LABELS**

#### **DESCRIPTION OF LOCATION**

- D indicates DOORS
- o indicates <u>O</u>PENING (windows, sidelites, transoms, etc.)
- **W** indicates <u>W</u>ALLS (glass meets ASTM Ell9; providing a barrier to radiant heat transfer)

#### **HOSE STREAM TEST**

H indicates glazing meets the <u>H</u>OSE stream test requirements of the test standard (required for 45 minutes and above)

or

NH indicates the glazing does NOT meet the HOSE stream test standard (allowed for 20 minute only)

#### **TEMPERATURE RISE**

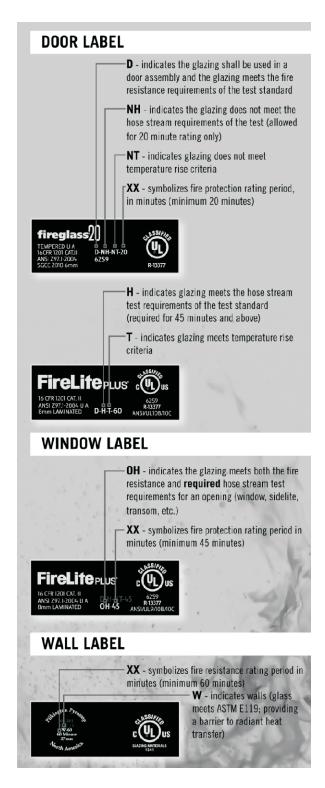
T indicates glazing meets<u>TEMPERATURE</u> rise criteria

or

NT indicates glazing does NOT meet TEMPERATURE rise criteria

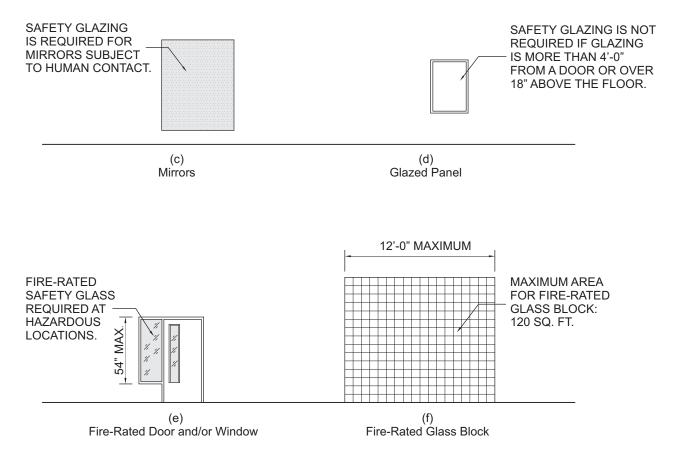
#### **MINUTES**

**XX** symbolizes fire protection rating period in minutes



(b) Fire-rated glass labeling example

#### SAFETY AND FIRE-RATED GLAZING



#### SAFETY AND FIRE-RATED GLAZING

	Finishes	
Ceiling	The minimum ceiling height shall be such that ceiling fans, light fixtures, HVAC equipment, fire system, and lifesafety equipment will not endanger, or be disabled by, the occupants.  1. Ceilings in group toilet rooms, kitchens, sculleries, can-wash areas, showers, and locker rooms shall be impervious.  2. Ceiling finish shall be free of any carpet.	Reference SREF 5(9)(b) FFPC NFPA 101 15.3.3 FFPC NFPA 101 15.7.4
Walls	Toilet partitions and toilet room walls, shower partitions and shower room walls, and kitchen, food preparation, scullery, and can-wash room walls shall be finished with dense, nonabsorbent, and noncorrosive materials having a smooth, impervious surface. Impervious finishes shall extend a minimum of four feet above the floor in toilet rooms and six feet above the floor in kitchens, sculleries, can-wash areas, and shower rooms.	SREF 5(9)(c)  FFPC NFPA 101 15.3.3  FFPC NFPA 101 15.7.4
Floors	Floor finish materials shall be permanently affixed to an educational or ancillary facility and comply with the following:  1. All interior floors shall be nonslip and exposed concrete floors shall be sealed against dusting.  2. Interior floors shall have surfaces that are even and substantially level.  3. Interior and exterior means of egress shall have floor surfaces that are even, substantially level, and free from irregularities, except for tactile warnings.  4. Floors in toilet rooms, locker rooms, shower rooms, drying areas, kitchens, food preparation areas, scullery areas, canwash areas, and other floors that may become slippery when wet shall have a nonslip, impervious surface.  5. Individual toilet room floors and base shall be nonslip and impervious.  6. Art rooms, vocational shops, industrial arts shops, gymnasium exercise rooms, areas under fixed seating in auditoriums, mechanical rooms, storage rooms, and ancillary facilities where activities involved make the use of other floor materials impractical, shall have integrally hardened and sealed concrete floors.  7. Ramp and stair walking surfaces shall be slip resistant.  8. Clinics and food service areas shall have floor finishes that can be cleaned daily with a germicidal detergent. (Note: Food service area floors do not require cleaning with a tuberculocidal disinfectant.)	SREF 5(9)(d)
Acoustics	Each interior instructional space <u>shall be</u> acoustically treated to control reverberation, echo, and excessive deadness.	SREF 5(9)(e)



FLOORS IN TOILET ROOMS, LOCKER ROOMS, SHOWER ROOMS, DRYING AREAS, KITCHENS, FOOD PREPARATION AREAS, SCULLERY AREAS, CAN-WASH AREAS, AND OTHER FLOORS THAT MAY BECOME SLIPPERY WHEN WET SHALL HAVE A NONSLIP, IMPERVIOUS SURFACE.

IMPERVIOUS FINISHES, WHERE REQUIRED, SHALL EXTEND ABOVE THE FLOOR AS SPECIFIED IN SREF 5.9.c.





(a) Impervious finishes, nonslip where required for floor finishes

BULLETIN BOARDS, POSTERS AND PAPER ATTACHED DIRECTLY TO THE WALL SHALL NOT EXCEED 20 PERCENT OF THE AGGREGATE WALL AREA TO WHICH THEY ARE APPLIED. IN AN UNSPRINKLERED BUILDING AND SHALL NOT EXCEED 50 PERCENT IF LOCATED IN A BUILDING THAT IS PROTECTED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 101 SECTION 9.7 (NFPA 101 15.3.3).

CEILING HUNG DISPLAY CREATES A LOW CEILING HAZARD





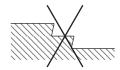
(b) Material Finish - proper use of bulletin board for display



(c) Material Finish Hazards - non-approved finishes

#### **FINISHES**

Stairs				
	Minimum changes in elevation	Changes in elevation of 12 inches or less shall be made by ramps.	Reference	
Proportion	Risers	Risers shall be a maximum height of 8 inches Treads shall be a minimum of 9 inches. Where a change in level in a means of egress not exceeding 21 inches is achieved by a stair, the minimum tread depth is 13 inches.		
	Variation	Treads shall be of uniform depth and risers of uniform height in any stairway between two floors. There shall be no variation exceeding <sup>3</sup> / <sub>16</sub> inch in the depth of adjacent treads or in the height of adjacent risers and the tolerance between the largest and smallest riser or between the largest and smallest tread shall not exceed <sup>3</sup> / <sub>8</sub> inch in any flight.	SREF 5(10)(a) Rule 69A-	
	Stairs	Minimum stair widths shall be based on the number of occupants served but not less than 44 inches.  Stairs shall not decrease in width along the direction of egress travel.	58.0081(15), F.A.C. FFPC NFPA 101 15.2.2	
Widths	Landings	The width of landings shall be not less than the width of stairways they serve.  Every landing shall have a minimum dimension measured in the direction of travel equal to the width of the stairway.  Exception: Landings shall be permitted to be not more than 4 feet in the direction of travel provided the stair has a straight run.  During its swing, any door in a means of egress shall leave unobstructed at least one half of the required width of an aisle, corridor, passageway, or landing.	FFPC NFPA 101 7.2 FFPC NFPA 101 Table 7.2.2.2.1.1(b)	
Landings	A flight of stairs shall between floors or lan			
Storage	There shall be no enclosed, useable space within an exit enclosure, including under stairs.		Rule 69A- 58.0081(15) (c), F.A.C.	







(a)
Differences in floor elevations that require fewer than three risers shall be ramped.

ADJACENT RISERS
ADJACENT TREADS

MAXIMUM VARIATION

DEPTH 3/16" ADJACENT TREADS HEIGHT 3/16" ADJACENT RISERS

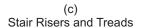
3/8" TOTAL FLIGHT

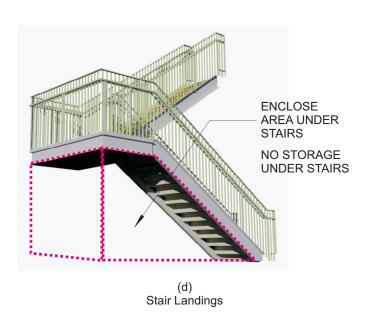
(b)
Dimensional Uniformity

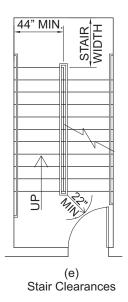
**EXISTING STAIR TREADS AND RISERS** 

MAXIMUM RISER 8"

MINIMUM TREAD 9"

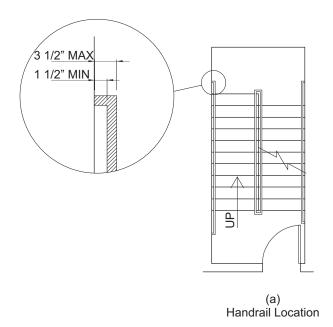


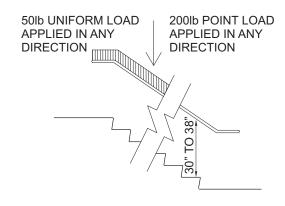




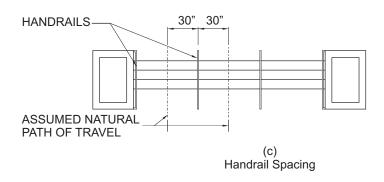
**STAIRS** 

	Handrail at Stairs	
	Stairways shall have handrails on each side.	Reference
	Exception:  Aisle stairs provided with a center handrail need not have additional handrails.	
Location	Stairs shall be clear of all obstructions except projections not exceeding 4.5 inches at or below handrail height on each side.	
Location	Handrails shall extend at least 12 inches horizontally beyond the top riser of a flight. At the bottom, the handrail shall continue to slope for a distance of the depth of one tread from the bottom riser.	SREF 5(10)(a) FFPC
	Clear space between handrail and wall shall be a minimum of $1^{1}/_{2}$ inches.	NFPA 101, Chapter 15.2.2
Height	Stairways shall be equipped with handrails located not less than 30 inches nor more than 38 inches above the leading edge of a tread.	FFPC NFPA 101, Chapter
3 1	Facilities housing pre-K through grade six shall also include a second handrail located 26 inches in height.	7.2.2.4
Handrail Loading	Handrails shall be maintained in a safe and secure condition at all times and shall be capable of supporting a human impact applied at any point in any direction.	FFPC NFPA 101, Chapter Table 7.3.3.1
	Stairways shall be equipped with handrails within 44 inches of all portions of the required egress width.	
Handrail Spacing	Such stairs will not have their egress capacity adjusted to a higher occupant load than permitted by the capacity factor in Table 7.3.3.1, FFPC NFPA 101, if the stair's clear width between handrails exceeds 60 inches.	
	The required egress width shall be along the natural path of travel.	



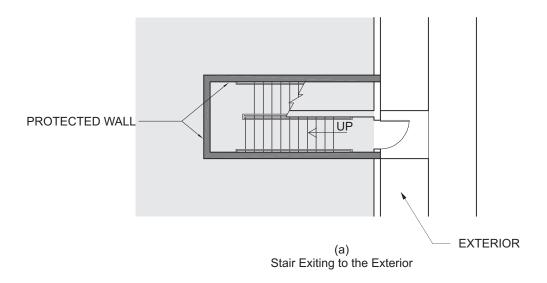


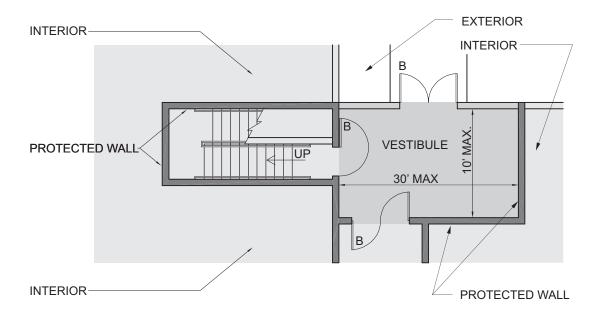
(b) Existing Handrail Height and Loading



# **HANDRAILS AT STAIRS**

Interior Stairs				
	Exit stairways between floors shall be enclosed in or separated by	Reference		
Protection	All openings through a floor and penetrations through a floor shall be protected by a shaft enclosure.	FFPC NFPA 101 15.3.1		
	A shaft enclosure is not required for floor opening between a mezzanine and another floor below.	FFPC NFPA 101 8.6		
	All interior stairways shall open directly to the exterior, into a protected vestibule or into a protected corridor that opens to the exterior.	Rule 69A-		
Access and Discharge	Stairway shall discharge to a vestibule or foyer that meets all of the criteria set forth in FFPC NFPA 101 Chapter 7.7.2.5.	58.0081(15), F.A.C.		
		FFPC NFPA 101 7.7		





(b)
Stair Exiting to a Protected Vestibule Vestibule dimension in accordance with FFPC NFPA 101 7.7.2.5

# **STAIR EXITING**

	Equipment	
	Fire blankets shall be provided as follows:	Reference
Fire Blankets	<ol> <li>Fire blankets shall be readily visible and shall be placed in locations that are readily accessible and suitable for the hazard present.</li> <li>Fire blankets shall be on shelves or in cabinets so that the top of the fire blanket is five feet or less above finished floor.</li> <li>Fire blankets shall be located in each laboratory and each shop where a personal fire hazard may exist.</li> </ol>	SREF 5(11)(a)
Vault Doors	Where a vault or security system is provided, vault doors and facility	CDEE 5/44\/b\
and Security System	exit doors shall be operable from the inside at all times without the use of special keys, tools, or equipment.	SREF 5(11)(b)
Waste Compactors and Destructors	Waste compactors and destructors at educational facilities shall be accessible for maintenance and sanitation and fenced or otherwise made inaccessible to students.	SREF 5(11)(c)
Waste Chutes and Collectors	Waste chutes and collectors, including dumpsters, shall be accessible for maintenance and sanitation and fenced or otherwise made inaccessible to students. Collectors and dumpsters shall be located on a concrete slab. Wet garbage shall be stored in impermeable, leak-proof, fly-tight containers pending disposal.	SREF 5(11)(d)
Residential Appliances	Residential-type appliances, such as stoves, hoods, refrigerators, washers, dryers, ovens, and unit kitchens when used in classrooms, laboratories, lounges, or shops, shall be maintained in a safe and secure condition at all times.	SREF 5(11)(e) NFPA 96
Built-In Cabinets and Casework	Cabinets and casework, such as in kitchens, toilet areas classrooms, etc., shall be accessible, free of hazards, and maintained in a safe and secure condition at all times.  Built-in cabinets and casework within a path of egress must not decrease the required egress width and must be made of Class A-rated materials and impact-resistant glazing unless protected throughout by an approved automatic sprinkler system.	SREF 5(11)(f) FFPC NFPA 101 9.7
Athletic and Recreational Equipment	Athletic and recreational equipment, where provided, shall be kept clean and in a safe condition.	SREF 5(11)(g)
Shooting Range	Shooting range equipment, where provided, shall be maintained in conformance with manufacturer's specifications to minimize hazards to occupants and users. Indoor shooting ranges shall have fresh air intake and positive exhaust of noxious fumes to the outside.	SREF 5(11)(h)
First Aid Kit	First aid kits shall be fully equipped per Board policy and shall be available for student use under adult supervision.  Alcohol-based dispensers shall be protected in accordance with NFPA 101 Chapter 15.3.2.4.	SREF 5(11)(i) FFPC NFPA 101 15.3.2.4



(a)
Fire Extinguisher and Fire Blanket - located in laboratory and each shop where a personal fire hazard may exist.

RESIDENTIAL-TYPE RANGES INSTALLED IN HOME ECONOMICS INSTRUCTIONAL SPACES, CLASSROOMS, FACULTY LOUNGES, AND SIMILAR AREAS SHALL NOT BE REQUIRED TO COMPLY WITH THE PROVISIONS FOR COMMERCIAL COOKING APPLIANCES UNDER NFPA 96, PROVIDED ALL OF THE FOLLOWING REQUIREMENTS ARE MET:

- (A) THE SPACE CONTAINS ONLY RESIDENTIAL-TYPE RANGES WITH HOODS VENTED TO THE OUTSIDE.
- (B) FIRE EXTINGUISHERS ARE INSTALLED IN ACCORDANCE WITH NFPA 10.
- (C) THE SPACE CONTAINING THE RESIDENTIAL-TYPE RANGE IS NOT CLASSIFIED AS AN ASSEMBLY.



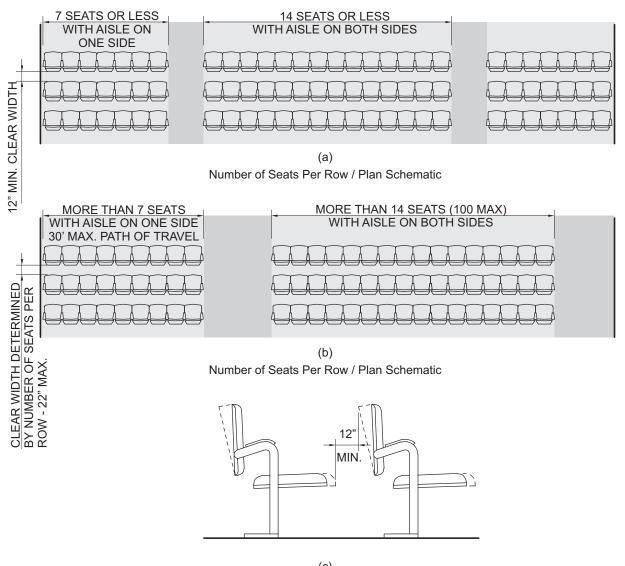


(d)
Equipment - Residential appliances
used in instructional spaces

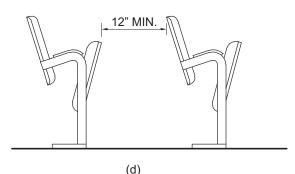
# **EQUIPMENT**

Auditorium Seating*			
Rows of	Maximum Number of Seats per Row	Clear Width of Aisle Accessway Required	Reference
Seating Served by Aisles or Doorways at	100 Seats	14 seats per row or less:  12 inches minimum clear width.  More than 14 seats per row:	
Both Ends  (Aisle Accessways Serving Seating not at Tables)	Rows of seating served by aisles or doorways at both ends shall not exceed 100 seats per row.	Increase 12 inch minimum clear width by 0.3 inches for every additional seat beyond 14.  Minimum clear width not required to exceed 22 inches.	SREF 5(12)(f)
Rows of Seating Served by an Aisle or Doorway at One End Only  (Aisle Accessways Serving Seating not at Tables)	Determined by path of travel. Path of travel shall not exceed 30 ft from any seat to a point where a person has a choice of two paths of travel to two exits.	7 seats per row or less:  12 inches minimum clear width.  More than 7 seats per row:  Increase 12 inches minimum clear width by 0.6 inches for every additional seat beyond seven.  Minimum clear width not required to exceed 22 inches.	FFPC NFPA 101 13.2.5.5

<sup>\*</sup>See FFPC NFPA 101 13.2.5.5 for additional requirements regarding auditorium seating.



(c) Non-self Rising Seat - measurement for clear width



Self Rising Seat - measurement for clear width

# **AUDITORIUM SEATING**

	Auditorium Aisle Widths				
	Aisles shall lead to an exit.				Reference
Aisles	possible in either Dead-end aisles s Exceptions: A longer dead-ent the dead-end ais measured along a inches plus 0.6 in the row.	of two directions shall not be greated aisle shall be le are not more a row of seats he had accordance we	s shall be uniformater than 20 feet e permitted when than 24 seats aving a minimulitional seat ove	re seats served by from another aisle, m clear width of 12 r a total of seven in hapter 13.4.2.10 for	SREF 5(12)(f) FFPC NFPA 101 13.2.5.4.6 FFPC
Type of			Inches of Cle	ear Width per Seat	NFPA 101 13.2.5.6.2
Aisles Widths	Minimum Cle	ear Width	l	Served	
	Stairs	Level or Ramped Aisles	Stairs	Passageways, Ramps, Doorways	FFPC NFPA 101 13.2.5.6.3(4)
Aisle Width 'A'	42 Inches  36 Inches where aisle does not serve more than 50 seats	42 Inches 36 Inches where aisle does not serve more than 50 seats	0.300 A <sup>1</sup> B <sup>2</sup>	0.220 C³	FFPC NFPA 101 Table 13.2.3.2
Aisle Width 'B'	36 inches	36 inches	0.300 A <sup>1</sup> B <sup>2</sup>	0.220 C <sup>3</sup>	
Aisle Width 'C'		required egres	s capacity of th	orm a single path of at path shall be no converging aisles.	

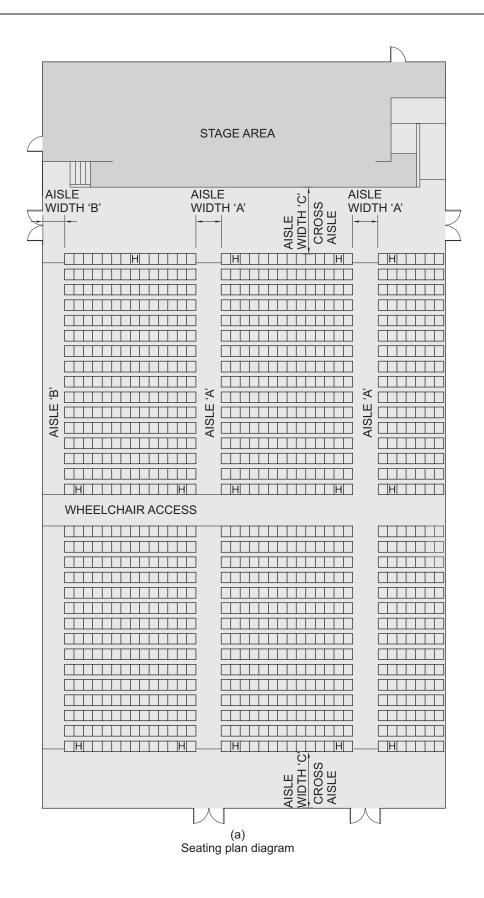
# Notes:

(See Table 13.2.3.2, FFPC NFPA 101.)

A. If risers exceed 7 in. in height, multiply the stair width in the table by factor A, where

5

- B. Stairs not having a handrail within a 30 inches horizontal distance shall be 25 percent wider than otherwise calculated, i.e., multiply by factor B = 1.25.
- C. Ramps steeper than 1:10 slope where used in ascent shall have their width increased by 10 percent, i.e., multiply by factor C = 1.10.



# **AUDITORIUM AISLE WIDTHS**

Grandstands and Bleachers			
	Aisles not Required	Reference	
Number of Rows	16 rows or less in height.		
Row-to-Row Rise	Not to exceed 6 inches.		
Row Spacing	Not to exceed 28 inches unless the seat boards and floor boards are at the same level.		
Railings and Guards	Railings at least 42 inches high shall be provided at the top and sides of bleachers and grandstands.  Railings or guards no less than 42 inches above the aisle surface or foot rest or no less than 36 inches above the center of the seat or seat board surface, whichever is adjacent, shall be provided along those portions of backs and ends of all grandstands where the seats are in excess of 48 inches above the floor or finished ground level except where an adjacent wall or fence affords an equivalent safeguard.	SREF 5(13)(n)  FFPC NFPA 101 13.2.5.6.1.2  FFPC NFPA 101 13.4.8	
Seat Boards	The first seating board is not more than 12 inches above the ground or floor below or a cross aisle.  Seat boards provide a walking surface with a minimum width of 12 inches.  Aisles Required	FFPC NFPA 1 25.1.1	
Number of Rows	More than 16 rows in height.		
Maximum Dead-End	16 rows maximum in height when seats do not have backrests.		

ACCESS TO UNDERSIDES OF BLEACHERS SHOULD BE RESTRICTED TO PREVENT HIDING AND ENTRAPMENT ZONES.



NO STORAGE ALLOWED UNDER BLEACHERS.

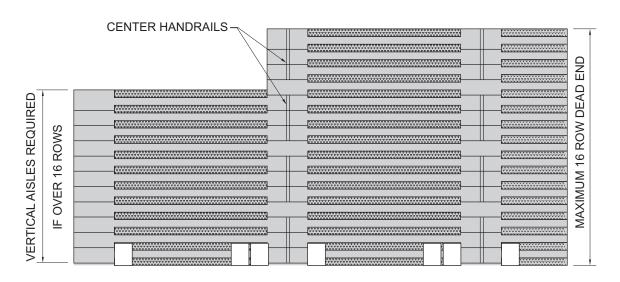


(a) Underside of bleachers and grandstands



LIMIT ACCESS TO UNDERSIDE OF BLEACHERS TO PREVENT HIDING PLACES AND ENHANCE SECURITY.

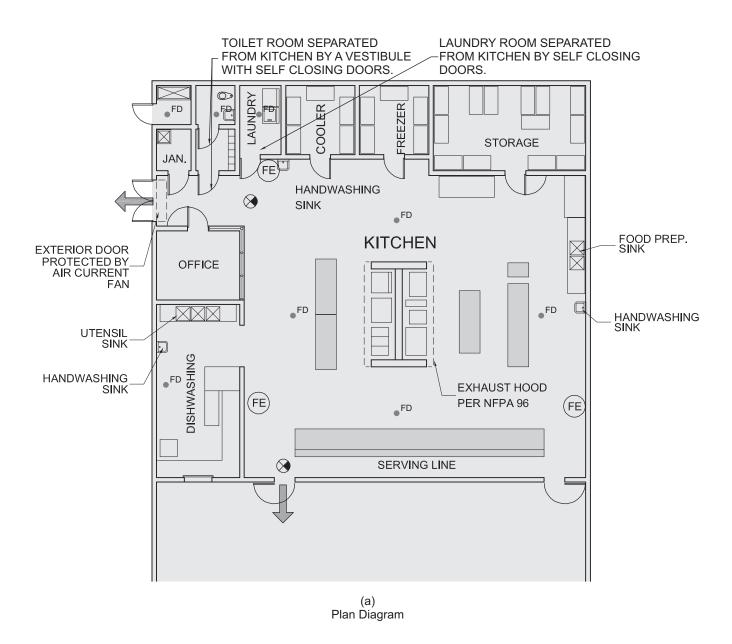
(b) Retractable Bleacher Assembly



(c) Schematic Plan with Over 16 Rows

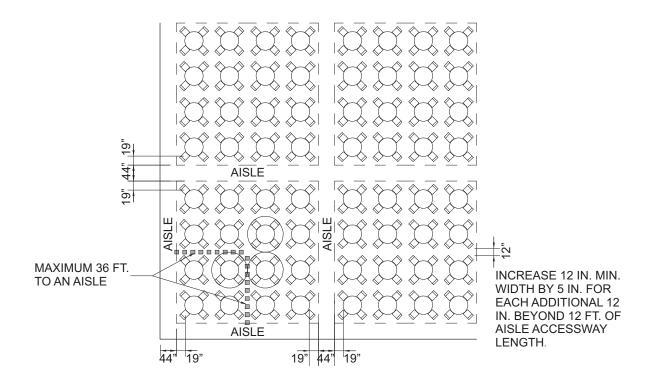
# **GRANDSTANDS AND BLEACHERS**

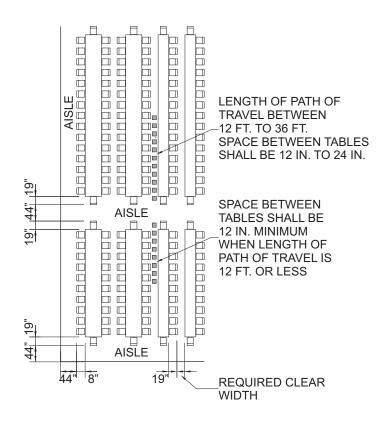
	Kitchens and Food Service	
	Kitchens and food service areas shall be in compliance with	Reference
General	DOH Rules in Chapter 64E-11, FAC. Other administrative and programmatic provisions may apply.	SREF 5(13)(p)
	Kitchens and food service areas shall be provided with toilet and hand-washing and toilet facilities for employees as required by code, state rule, and statute.	
Toilet and Hand-	Toilet rooms shall be completely enclosed, have self-closing doors, and shall open into vestibules with self-closing doors.	SREF 5(13) (p)1
washing Facilities	Toilet rooms shall not open directly into food preparation areas, serving areas, or dining areas.	SREF 5(13) (p)2
	A minimum of one water closet and one lavatory, with hot and cold water, shall be provided in each staff toilet rooms.	
Floor Drains	Floor drains shall be provided in the food serving area, kitchen area, scullery, garbage and rubbish rooms, and can-wash area.	SREF 5(13) (p)4
Vermin Control	All areas shall be effectively rodent-proofed. Windows used for ventilation must be screened except when effective means of vermin control are used. Screening material shall not be less than 16 mesh to the inch or equivalent, tight fitting, and free of breaks.	SREF 5(13) (p)7
NFPA 96 Requirements	NFPA 96 provides the minimum fire safety requirements related to the design installation, operation, inspection, and maintenance of all cooking operations.  These requirements include, but are not limited to, all manner of cooking equipment, exhaust hoods, grease removal devices, exhaust duct work, exhaust fans, dampers, fire extinguishing equipment, and all other auxiliary or ancillary components or systems that are involved in the capture, containment, and control of grease laden cooking effluent.	SREF 5(13) (p)10 NFPA 96



# KITCHEN AND FOOD SERVICE

Aisles Serving Seating at Tables				
	Aisles	Aisle Accessways	Reference	
		12 inches minimum where path of travel is 12 feet or less.		
Minimum	44 inches	Where path of travel is greater than 12 feet:	SREF 5(12)(g)	
Clear Width	36 inches where serving an occupant load of no more than 50.	The minimum required clear width 12-inch width of an aisle accessway shall be increased beyond the 12 inch requirement by 0.5 inches for each additional 12 inches or fraction thereof beyond 12 feet of aisle accessway length, where measured from the center of the seat farthest from an aisle.	FFPC NFPA 101 13.2.5.7.4	
Measurement of Clear Width	Where non-fixed seating is located between a table and an aisle, the measurement of required clear width of the aisle shall be made to a line 19 inches away from the edge of the table, away from the edge of said table.	Where non-fixed seating is located between a table and an aisle accessway, the measurement of required clear width of the aisle accessway shall be made to a line 19 inches away from the edge of the table. The 19 inches distance shall be measured perpendicularly to the edge of said table.	FFPC NFPA 101 13.2.5.8.3	
Maximum Length Path of Travel	N/A	The path of travel along the aisle accessway shall not exceed 36 feet from any seat to the closest aisle or egress doorway.	FFPC NFPA 101 13.2.5.7.5	





#### **AISLES SERVING SEATING AT TABLES**

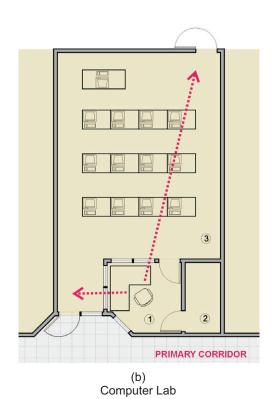
Laboratories and Shops				
	1. Every science room, laboratory, or shop where students handle	Reference		
Chemistry Lab, Physical Lab, Home Economics Lab, Automobile Shop, Wood- working Shop, and Welding Shop	materials or chemicals potentially dangerous to human tissue shall be provided with a dousing shower, floor drain, and eye-wash facilities.  2. Automotive repair shops shall have engine exhaust systems.  3. Working machinery with component parts shall be color-coded per ANSI Z53.1, "American National Standard Safety Color Code for Marking Physical Hazards."  4. All equipment that is permanently mounted shall be securely anchored to its supporting surface.  5. Safety zone lines shall be marked on the floor areas surrounding working machinery.  6. Master control valves or switches shall be provided in each laboratory-type space and each shop-type space that is equipped with unprotected gas cocks, compressed air valves, water service, or electric service that is easily accessible to students.  a. The master control valves and switches shall be clearly labeled and located in a nonlockable space strategically placed no more than 15 feet from the instructor's work station to allow for emergency cut-off of services and shall be in addition to the regular main gas supply cut-off.  b. Valves shall be completely shut off with a one-quarter turn.  c. The main supply cut-off shall shut down upon activation of the fire alarm system.  d. Emergency shut-offs are not required for ordinary office machines, computers, nonhazardous machines, and domestic sewing machines.  7. Woodworking areas shall have dust collectors and exhaust systems.  8. Welding shops shall have fume-removal and exhaust systems.  9. Hazardous work and storage areas shall be marked with warning signs.	SREF 5(13)(q)		
	Library and Media Center			
Requirement	Library and media centers shall comply with the general requirements found elsewhere in this section. The width of aisles, reach ranges, and seating in stacks and reading rooms shall comply with federal and state accessibility requirements. Libraries and media centers shall be kept below 60 percent relative humidity.	SREF 5(13)(r)		



WALL MOUNTED OR CEILING
HUNG EQUIPMENT MUST BE
MOUNTED ABOVE 6'- 8" TO
ELIMINATE POTENTIAL HAZARDS.

(a) Library/Media Center

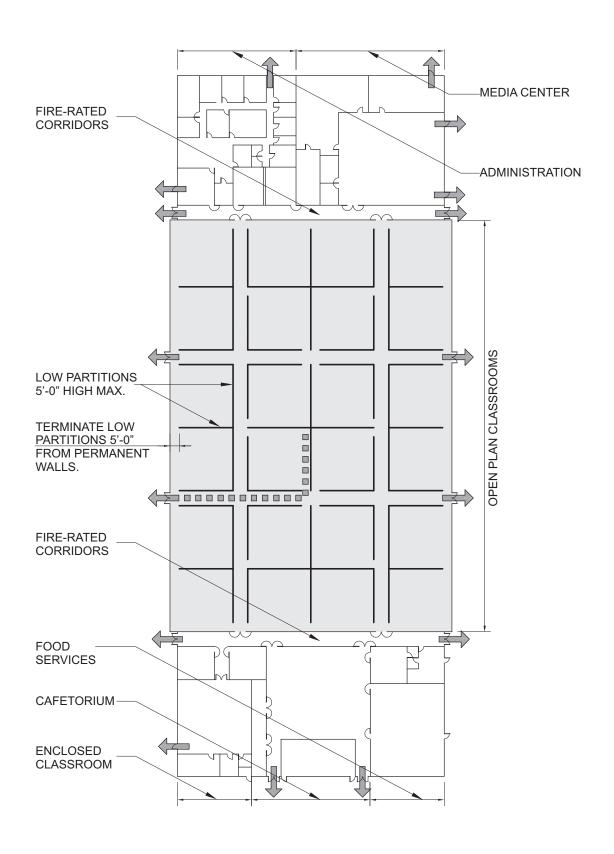
NOTE: LOW STACKS INCREASE VISUAL CONTROL.



NOTE: CLEAR LINES OF SITE ALLOW FOR VISUAL CONTROL.

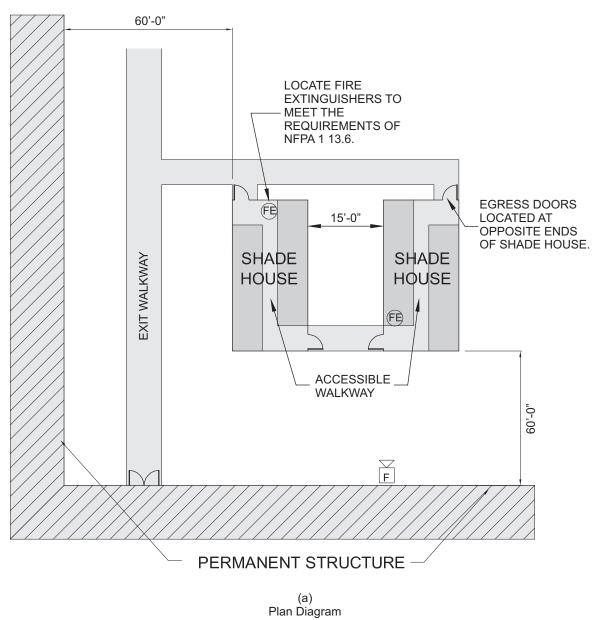
# LABORATORIES, SHOPS AND LIBRARY/MEDIA CENTERS

Open Plan Classrooms Group E Educational Occupancy Open Plan Area				
Partitions	Low height, maximum 5 feet high		Reference	
	Terminate 5 feet from any perma Circulation openings 5 feet wide			
Egress	Each room occupied by more that means of egress entering into se	an 300 persons shall have 2 or more eparate atmospheres.	SREF 5(13)(s)	
	Where 3 or more means of eq means of egress permitted to er not exceed 2.	Rule		
Interior	Non sprinklered Building	Sprinklered Building	69A- 58.0081(12),	
Finishes	Class 'B' throughout Class 'C' for 5-foot high partitions	Class 'C'	F.A.C.	
Travel Distance	150 feet	200 feet	FFPC NFPA 101 15.4.3	
Access Openings for Fire Department Use	1 opening in each 50 feet of exterior wall on an accessible side of the building.	1 opening in each 200 feet of exterior wall on an accessible side of the building.	13.4.3	



**OPEN PLAN CLASSROOMS** 

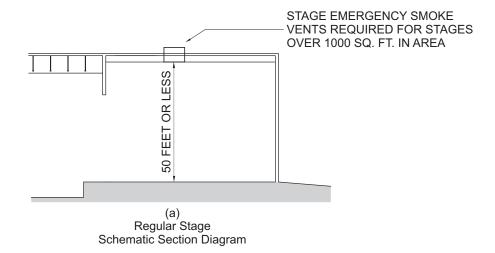
	Shade and Green Houses	
Construction	Type I, II, or IV Construction (metal frame) capable of withstanding the appropriate wind load.	Reference
Location	The location of the shade/green house shall not hinder exiting from new and/or existing structures.	SDEE 5/12\/\v\
Egress	A minimum of two doors remotely located shall be provided.  Doors shall be side-hinged and shall swing in the direction of egress.	SREF 5(13)(v) FFPC NFPA 1
Accessibility	Green houses shall meet accessibility requirements.  The accessible walkway shall be connected to doors leading to an accessible route to the permanent structure.	13.6
Shade Cloth	Shade cloth shall be tear-away fabric securely fastened to the structural frame	NFPA 1 Table 13.6.2
Fire Extinguisher	All portions of the building within 75 feet of travel distance to an extinguishing unit.	
Fire Safety Requirements	Fire alarm pull stations shall be located within 200 feet of any shade or green house.  Fire alarm horns mounted on a permanent building must be audible inside the shade/green house.	Rule 69A- 58.0081(18), F.A.C. SREF 5(13)v)
Space Heaters	Space heaters, when provided, shall be mounted at least 6 ft 8 in. AFF.	SREF 5(13)(v)

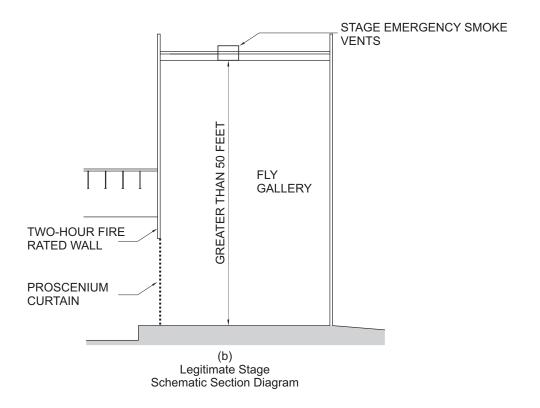


r ian biagrain

# **SHADE AND GREEN HOUSES**

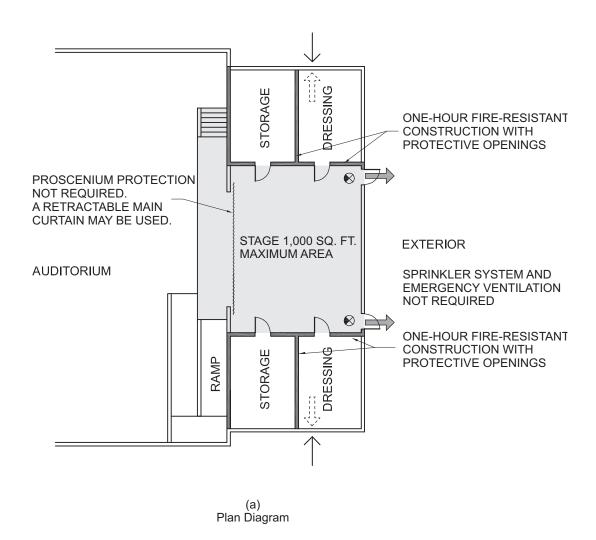
	Platforms and Stages	
Platform	A raised area within a building used for the presentation of music, plays, or other entertainment.	Reference
- idiloiiii	No overhead hanging curtains, drops, scenery, or stage effects other than lighting and sound.	
Regular	A space within a building used for entertainment and utilizing drops or scenery or other stage effects.	SREF 5(13) (w)
Stage	Stage height of 50 feet or less measured from the lowest point on the deck above.	Rule 69A-
Legitimate	A space within a building used for entertainment and utilizing drops, scenery or other stage effects.	58.0081(19), F.A.C.
Stage	Stage height is greater than 50 feet measured from the highest point of the roof to the floor deck above.	





# **PLATFORMS AND STAGES**

Regular Stage (Stages 1000 Sq. Ft. Maximum Area or with a Stage Height of 50 Ft. Maximum)			
Stage Areas	Stage shall be of the materials required for the type of building construction in which they are located.	Reference	
	Finished floor may be made of wood.  Proscenium opening protection is not required.		
	Separated from accessory spaces by 1-hour fire-resistant construction with protected openings.	SREF 5(13) (w)	
	Sprinklers system not required.	()	
	Emergency ventilation not required.		
Accessory Areas	Dressing rooms, workshops, storerooms, and other accessory spaces contiguous to stages shall be separated from each other and other building areas by 1-hour fire-resistant construction and protected openings. Walls shall extend tight to the roof deck.		

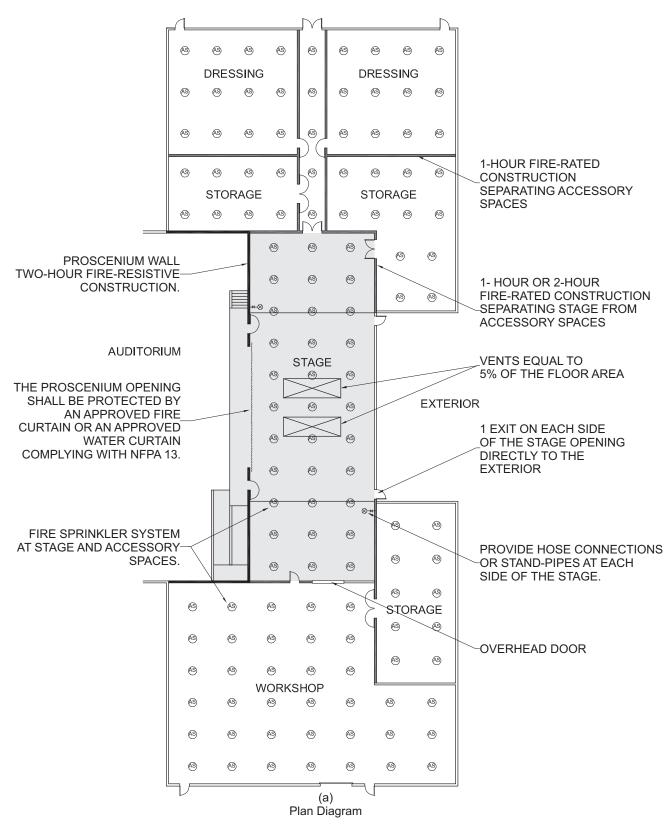


STAGES 1,000 SQ. FT. MAXIMUM AREA OR WITH A STAGE HEIGHT OF 50 FT. MAXIMUM (REGULAR STAGE)

Building is not sprinklered.

# **REGULAR STAGE**

Legitimate Stage (Stages Over 1000 Sq. Ft. In Area or with A Stage Height Greater Than 50 Ft.)		
Stage Areas	The minimum type of construction for stages shall be as required for	Reference
Protection	the building as determined by the occupancy, area, and height, except that the finished floor may be of wood in all types of construction.  All portions of a stage area with a stage height greater than 50 feet (15.2 m) shall be within an area separated from all other building areas by 2-hour fire-resistant construction with protected openings.  The 2-hour fire-resistant construction shall extend to the roof or floor deck above the auditorium.	
	Stage shall be protected by a supervised automatic sprinkler system Provide hose connections or stand-pipes at each side of stage.	
Ventilators	Emergency ventilation shall be provided by one or a combination or the following methods:  Smoke Control:  Maintain smoke level not less than 6 feet above the highest level of assembly seating or above the top of the proscenium opening where a proscenium wall and opening protection is provided.  Activation by sprinkler system and by a manually operated switch.  Roof Vents:  Two or more vents located near the center of and above the highest part of the stage.  Net free vent area equal to 5% of stage area.  Vents raised above the roof.  Open automatically by heat-activated devices and manually from stage floor.  Two means of egress required with one means of egress located on each side of the stage.	SREF 5(13) (w) FFPC NFPA 101 13.4.5
Egress	A second means of egress is not required from lighting and access catwalks, galleries, and gridirons where a means of escape to a floor or a roof is provided.	
Proscenium Wall	Stages shall be completely separated from the seating area by a proscenium wall of not less than 2-hour fire-resistive, noncombustible construction.	
Proscenium Curtain	The proscenium opening shall be protected by an approved fire curtain or an approved water curtain complying with NFPA 13.  The fire curtain or water curtain shall be designed to close automatically upon automatic detection of a fire and upon manual activation.  The fire curtain shall resist the passage of flame and smoke for 20 minutes between the stage area and the audience area.	
Accessory Areas	Accessory spaces contiguous to stages shall be separated from each other and other building areas by 1-hour fire-resistant construction, protected openings and shall be protected by a supervised automatic sprinkler system.	



STAGES OVER 1,000 SQ. FT OR WITH A STAGE HEIGHT GREATER THAN 50 FT.

#### **LEGITIMATE STAGE**

Relocatables for Classroom Use		
	Type IV (non-combustible)	Reference
Construction	Shall comply with: Americans with Disabilities Act, Florida Building Code.	
	Use at facilities housing Pre-K through grades 5 or 6, shall also conform to the Federal criteria "Accessibility Standards for Children's Environments."	
	Finished floor shall be 12 inches above base flood elevation.	
	Anchored to resist buoyant forces.	
Doors	Exit doors Shall swing in the direction of exit travel.  Classroom Locksets Lockset, which is readily opened from the side from which egress is to be made at all times, a threshold, heavy duty hinges, and closer to control door closing. Each door shall have a view panel as follows:  View panel Minimum 8 inches by 42 inches and a maximum 1,296 square inches. 1/4 inch tempered or safety glass installed with the bottom edge of the panel at 30 inches AFF.  Exterior doors shall open onto a 5 foot by 5 foot platform that is level with the interior floor and connects with an accessible ramp or steps equipped with handrails and guardrails.	SREF 5(14)
Windows	Operable windows equal to at least 5 percent of the floor area of the unit. Exterior doors may be included in computing the required 5 percent.  Awning, casement, or projecting windows shall not be placed in walls with adjacent walks, ramps, steps, or platforms.	

# Combustible construction (wood frame)



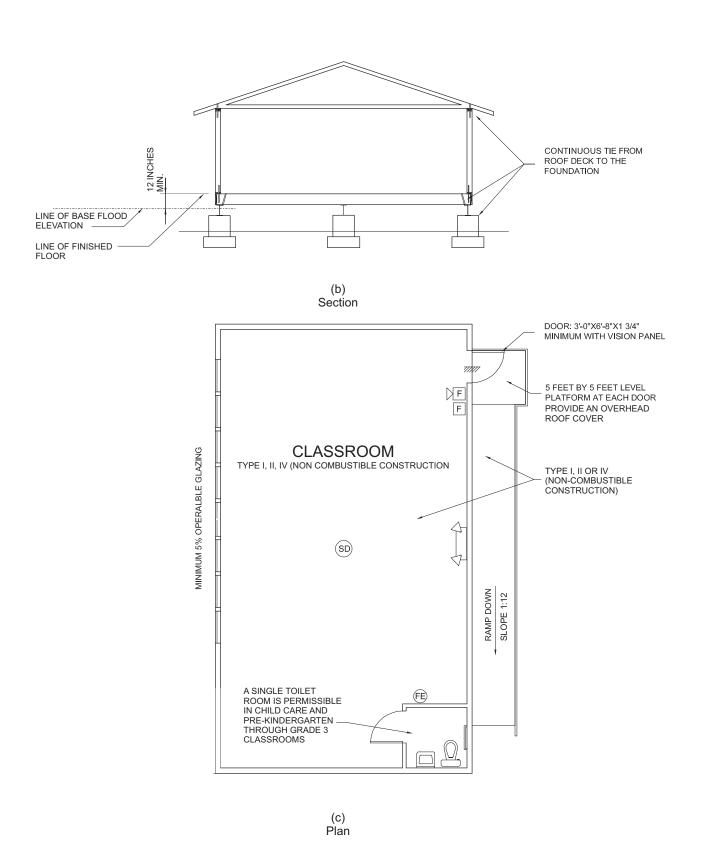








(a) Relocatable Types



# **RELOCATABLES FOR CLASSROOM USE**

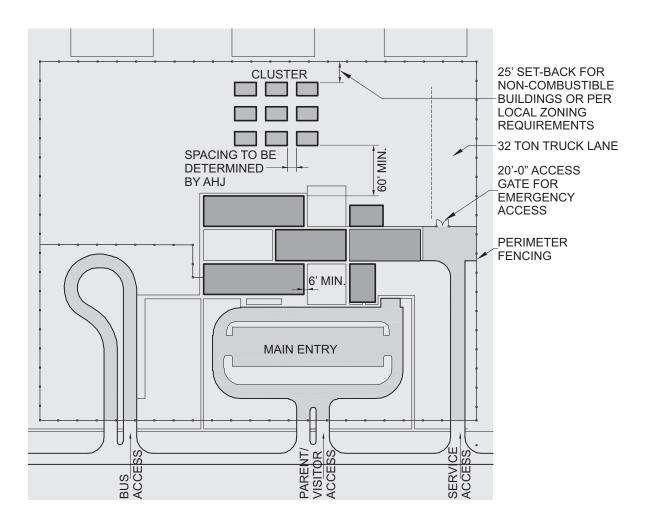
Relocatables for Classroom Use (continued)			
Fire Extinguisher	At least one appropriate fire extinguisher shall be provided in each relocatable classroom unit and in each classroom of a multi-classroom building.	Reference	
Emergency Lighting	Each classroom unit shall be equipped with emergency lighting.	SREF 5(14)	
Exterior Lighting	Exterior Lighting shall be provided as required elsewhere in these public educational facilities code requirements.	Rule	
Lighted Signs	Exit lights shall be provided as required by the Uniform Fire Safety Standards adopted by the State Fire Marshal.	69A-58.0082, F.A.C.	
Fire Safety Requirements	New relocatables shall be provided with fire alarm devices meeting the code requirements for permanent educational facilities and shall be connected to the facility's main fire alarm system as required by code.	SREF 5(14) (b)3.a.	
Accessible Covered Walks	Required from exit door to core facilities. Exception for "Temporary Relocatables" as defined in SREF Chapter 5(14)(b)3.a.		



(a) Covered Walks

# NOTE:

RELOCATABLES USED AS CLASSROOMS OR SPACES INTENDED FOR STUDENT OCCUPANCY, INCLUDING "MODULAR SCHOOLS," WHICH HAVE BEEN IN USEAT ASCHOOL SITE FOR FOUR YEARS OR MORE SHALL BE CONNECTED TO THE CORE FACILITIES BY COVERED ACCESSIBLE WALKWAYS.



(b) Separation of Units





(c) Skirting

NOTE:

CRAWL SPACES UNDERNEATH RELOCATABLE BUILDINGS SHOULD BE SECURED BY APPROPRIATE SKIRTING TO DENY ACCESS. SKIRTING SHOULD PROVIDE SECURE ENTRY GATING FOR PERIODIC INSPECTION BY APPROPRIATE FIRE MARSHAL AND SCHOOL DISTRICT PERSONNEL.

# **RELOCATABLES FOR CLASSROOM USE**

Conveying Systems		
	Passenger elevators, where provided, shall comply with applicable	Reference
Elevators	state and federal accessibility requirements. Passenger and service elevators shall be inspected by qualified elevator inspectors certified by the Bureau of Elevator Safety, Department of Business and Professional Regulation.	SREF 5(15)(a)
Dumbwaiters	Dumbwaiters, where provided, shall be maintained in an operable condition and car and counterweight safety devices shall lock the car or counterweight to the guiderails and disconnect power if hoist cables part or become slack.	SREF 5(15)(b)
Vertical Platform Lifts and Inclined Wheelchair Lifts	Vertical platform lifts and inclined wheelchair lifts, where provided, shall comply with the following:  1. Lifts shall have shielding devices to protect users from the machinery or other hazards and obstructions.  2. Lifts shall be inspected by inspectors certified by the Bureau of Elevator Safety, Department of Business and Professional Regulation.  3. Lifts shall be provided with emergency power so that the lift continues with its operation if power is interrupted while the unit is in use.  4. Vertical platform lifts shall comply with the following:  a. A lift installed at a stage shall be free of a warning light or alarm.  b. A lift installed in a corridor shall allow free and clear ingress and egress at all times.  c. A lift's audio-visual alarm shall be operational at all times and shall activate when the lift is in operation.  5. Inclined wheelchair lifts shall comply with the following:  a. The platform/ramp bidirectional sensing device shall be operational and shall stop travel if obstructions are encountered.  b. Guide rails shall be maintained to be smooth, continuous, and free of sharp edges or obstructions. All drive system components shall contain safety features for protection of users, and cables and pulling devices shall be shielded.  c. The lift audio-visual alarm shall activate when the lift is in operation.	SREF 5(15)(c)
Vehicle Lifts	Vehicle lifts, where provided, shall comply with the following:  1. Vehicle lifts shall be provided with mechanical safety locks to hold the lift in position in the event of a power or hydraulic failure.  2. The maximum lifting height for vehicle lifts shall be inches.  3. Underground reservoirs for hydraulic lifts that are not accessible for inspection shall comply with DEP and EPA regulations.	SREF 5(15)(d)





(a) Elevator

ELEVATORS SHALL BE SUBJECT TO PERIODIC INSPECTIONS AND TESTS AS SPECIFIED IN ASME A17.1/CSA B44 "SAFETY CODE FOR ELEVATORS AND ESCALATORS."

FOR MORE REGULATIONS FOR ELEVATORS, SEE FLORIDA ADMINISTRATIVE CODE 69A-47 ADOPTED IN CHAPTER 61C-5 FAC, FLORIDA ELEVATOR SAFETY CODE.

CONVEYING SYSTEMS SHALL COMPLY WITH NFPA 101 SECTION 9.4 AND 15.5.3.

EXISTING ELEVATORS, ESCALATORS, DUMBWAITERS AND MOVING WALKS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF ASME A17.3 "SAFETY CODE FOR EXISTING ELEVATORS AND ESCALATORS."

PERIODIC EVALUATION OF ALL FIRE-RATED WALLS IS RECOMMENDED TO ENSURE THAT THE INTEGRITY OF FIRE-RATED ASSEMBLIES IS MAINTAINED.

(b) Platform Lift



(c) Vertical Wheelchair Lift

# **CONVEYING SYSTEMS**

Mechanical		
	All occupied rooms and other rooms where odors or contaminants	Reference
	are generated shall be provided with either natural or mechanical ventilation.	
Ventilation	<ul> <li>Cooling towers, where provided, shall conform to the following: <ul> <li>a. Towers with combustible interior or exterior construction installed over buildings shall have fire sprinkler systems maintained in an operational condition at all times.</li> <li>b. Towers located on the ground shall be enclosed by a fence that is maintained in a safe and secure condition at all times.</li> <li>c. Open spaces or areas between the base of the tower and ground or roof of the building upon which it is located shall be screened to prevent the accumulation of combustible waste material under the tower and to prevent use of such space or area under the tower for storage of combustible materials.</li> </ul> </li> </ul>	SREF 5(16)(a)
Plumbing	<ul> <li>Every educational facility shall be provided with toilet and hand washing facilities for all occupants.</li> <li>1. Toilet facilities shall be maintained in a satisfactory state of repair at all times.</li> <li>2. Toilet facilities shall be cleaned, disinfected and serviced in accordance with district policies.</li> <li>3. All toilet facilities shall be accessible from all student-occupied spaces.</li> <li>4. All toilet rooms shall available for occupant use during the hours of operation.</li> <li>5. Faculty and staff toilet facilities shall be separate from student facilities in pre-K through grade 12 educational facilities.</li> <li>6. Unisex toilet rooms shall be provided only in child-care, pre-K through grade three, and ESE classrooms.</li> </ul>	SREF 5(16)(b)



(a)
Mechanical Equipment - Screened underside to prevent storage below equipment.



(b)
Cooling Tower - Fenced and screened when located at ground level.

### **MECHANICAL**

IMPERVIOUS FINISHES SHALL EXTEND A MINIMUM OF FOUR FEET ABOVE THE FLOOR IN TOILET ROOMS.

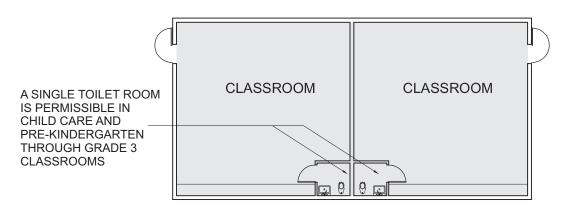
THE BASE OF AN IMPERVIOUS FINISHED WALL MUST MAINTAIN THE IMPERVIOUS FINISH BETWEEN THE WALL AND THE FLOOR. AN APPLIED RUBBER BASE IS NOT AN IMPERVIOUS FINISH.

TOILET ROOMS SHALL HAVE A NONSLIP, IMPERVIOUS SURFACE.

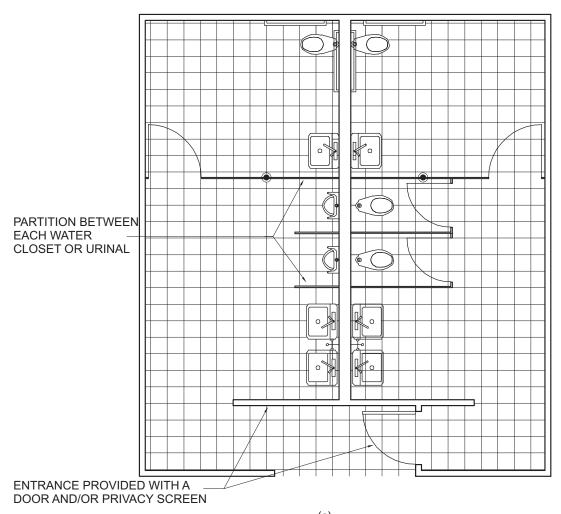


(a) Toilet Room Finishes

### **GROUP TOILETS**



(b)
Toilet Rooms inside the Classroom



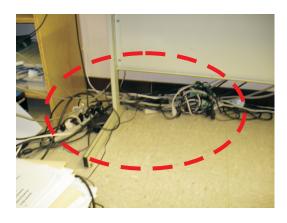
(c) Plan Diagram

#### **GROUP TOILETS**

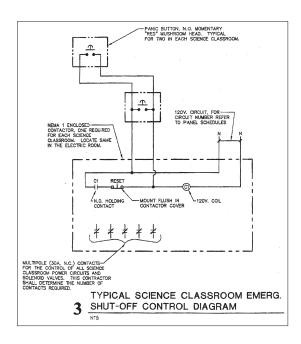
Electrical						
	Lighting fixtures shall be cleaned and maintained to provide the	Reference				
	minimum required foot-candles.					
Illumination	2. General illumination shall be maintained so that the failure of any single lighting unit, such as an electric bulb, will not leave any occupied area or means of egress in darkness.	SREF 5(17)(a)				
	Electrical wiring and equipment shall be maintained in a safe and secure condition at all times. Electrical wiring and equipment shall					
Power	comply with the following:  1. Electrical outlets.	SREF 5(17)(b)				
	2. Lighting and power controls. 3. Emergency shut-off switches.					
Site Lighting	Light fixtures, poles, and foundations used for site lighting, where provided, shall be maintained in a safe, secure, and operable condition at all times.  Each site lighting pole is grounded.	SREF 5(17)(c)				



(a) Emergency Shut-off



(b) Electrical Power Cord Hazard



(c) Emergency Control Shut-off Diagram

#### **ELECTRICAL**

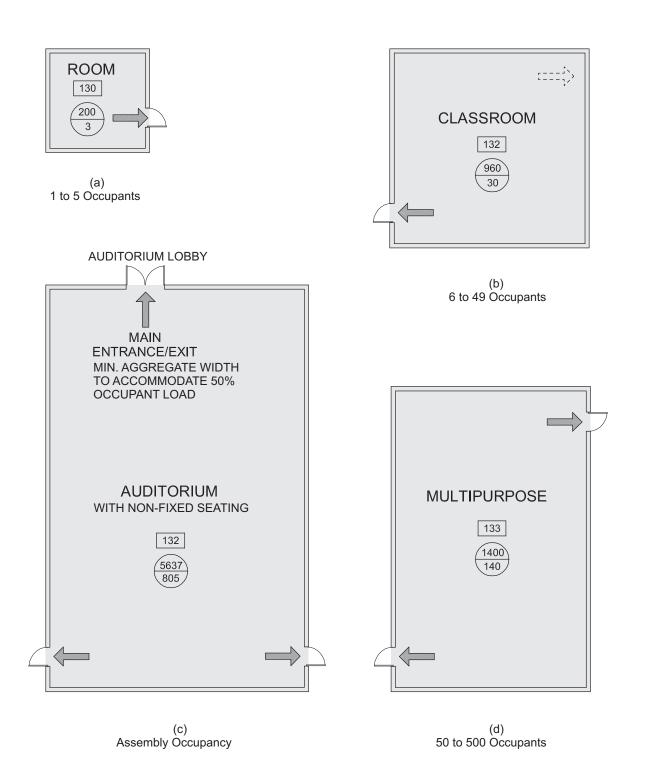
#### **Number of Required Means of Egress**

The number of means of egress shall be determined to meet the requirements for egress capacities and travel distances, but shall not be less than the minimum number of means of egress listed below.

Occupant Load	Minimum Re	Reference	
1 to 5	One means of egress		
	Unsprinklered Building	Sprinklered Building	
6 to 49*	One means of egress leading directly to exterior,  or  One means of egress and one emergency rescue window that opens directly to the exterior (in buildings three stories or less)  One means of egress  One means of egress		Rule 69A- 58.0081(9), F.A.C.
50 or More	Two means of egress where one exterior,  or  Two means of egress to two sep	FFPC NFPA 101 15.2.5	
	Special Egres	ss Requirements	
Assembly Occupancy	Main entrance/exit shall be of a half of the occupant load.	Reference FFPC NFPA 101 13.2.3.6.2	
Educational Occupancy	Rooms used for first grade children on the floor of exit discharge. Rooms used for second grade of than one story above the floor of	FFPC NFPA 101 15.2.1.2-3	
Occupancy Load	Minimum Number		
1 to 500	2	 	
500 to 1000	3	FFPC NFPA 101 7.4.1.2	
More than 1000	4	1	

<sup>\*</sup>In existing non-sprinklered buildings, every instructional space, and other spaces normally subject to student occupancy of 10 or more, shall have at least one (1) window, panel, or door leading to the exterior or to a separate atmosphere [Rule 69A-58.0081(9)(a),F.A.C.].

<sup>\*</sup>For buildings designed after October 18, 1994, the emergency rescue (escape) opening shall be provided in rooms over 250 square feet used for classroom or other educational purposes or normally subject to student occupancy of 6 or more [FAC 69A-58.0081(9)(b)].



#### **NUMBER OF REQUIRED MEANS OF EGRESS**

Separation of Means of Egress						
Occupancy	Minimum S	eparation	Reference			
Classification	Unsprinklered Building	FFPC				
			NFPA 101 15.2.5			
All Occupancies	1/2 Diagonal Rule	1/3 Diagonal Rule	FFPC NFPA 101 7.5.1.3			

#### 1/2 Diagonal Rule:

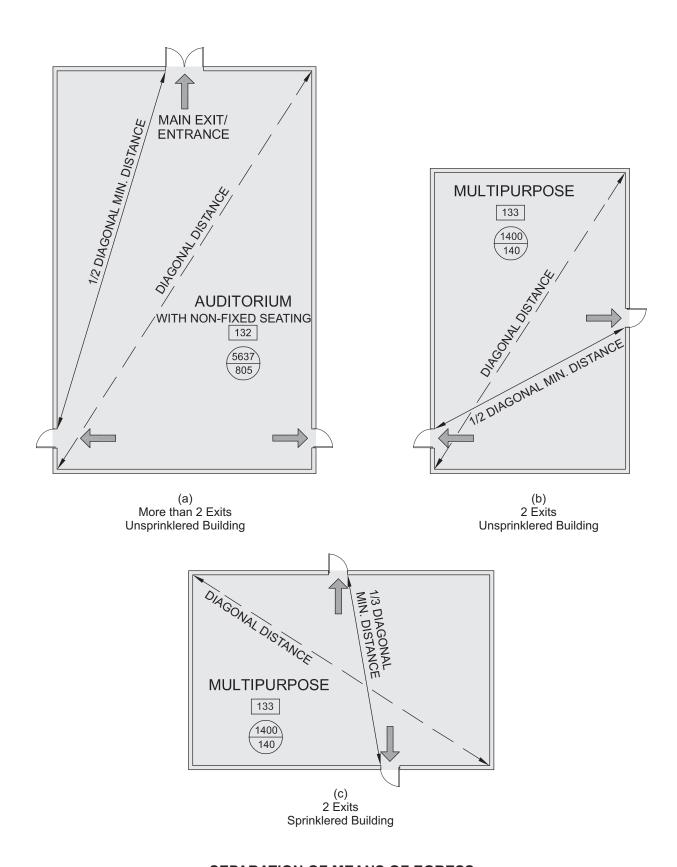
Where two or more exits or exit access doors are required in an *unsprinklered building*, at least two of the exits or exit access doors shall be placed a distance apart equal to not less than 1/2 of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between the nearest edge of the exit doors or exit access doors (FFPC NFPA 101 Chapter 7.5.1.3.2).

#### 1/3 Diagonal Rule:

Where two or more exits or exit access doors are required in a *sprinklered building*, at least two of the exits or exit access doors shall be placed a distance apart equal to not less than 1/3 of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between the nearest edge of the exit doors or exit access doors (FFPC NFPA 101 Chapter 7.5.1.3.3).

#### More than 2 Required Exits:

Where more than two exits or exit access doors are required, at least two of the required exits or exit access doors shall be arranged to comply with the above. The other exits or exit access doors shall be located so that if one becomes blocked, the others shall be available (FFPC NFPA 101 Chapter 7.5.1.3.1).

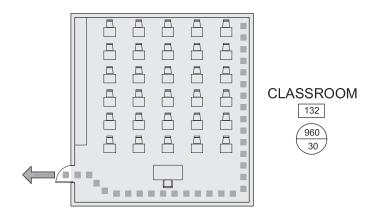


### **SEPARATION OF MEANS OF EGRESS**

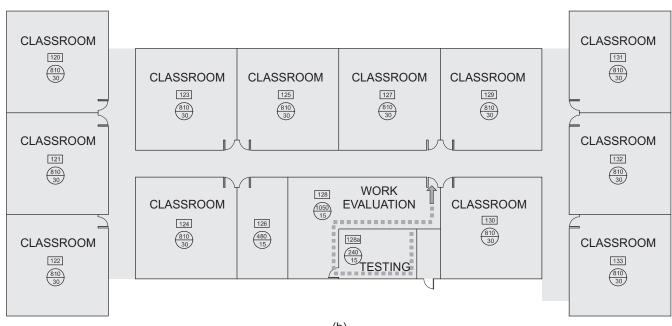
	Travel Distance						
Occupancy	Maximum Travel D	Distance to Exit (ft.)	Reference				
Classification	Unsprinklered Building	Sprinklered Building					
Group A Assembly	150	200	Rule 69A-				
Group B Business	200	300	58.0081(13), F.A.C.				
Group D Daycare	150	200	FFPC NFPA 101,				
Group E Educational	150	200	Chapters 15.2.6 39.2.6 17.2.6				

	Measurement of Travel Distance						
Travel Distance in a Room	Distance in a corners or obstructions, to the centerline of the doorway.						
Travel Distance in a Building	Travel distance to an exit is measured along the centerline of the natural path of travel, starting from the most remote point subject to occupancy, with a 1-foot clearance around any corners or obstructions, to the nearest edge of the doorway or other point at which the exit begins.	FFPC NFPA 101 7.5.4.2					

Common Path of Travel							
General	The Common Path of Travel is measured along the centerline of the natural path of travel, starting from the most remote point of the room or space, with a 1-foot clearance around any corners or obstructions, and terminates at that point where two separate and distinct routes become available.  The Common Path of Travel shall not exceed 75 feet.	Reference FFPC NFPA 101 7.6.1 FFPC NFPA 101 15.2.5.3					
Assembly Occupancies	I any noint where serving any number of occupants and for the first						



(a)
Measurement of Travel Distance in a Room
The Common Path of Travel Shall Not
Exceed 75 FT



(b)
Measurement of Travel Distance in a Building
The Common Path of Travel Shall Not
Exceed 75 FT

#### TRAVEL DISTANCE

Dead End Corridors						
Occupancy	Maximum Dead	End Length (ft.)	Reference			
Classification	Unsprinklered Building	Sprinklered Building	Reference			
Group A	20	20				
Assembly	20	20				
Group B	20	50	Rule			
Business	20	50	69A-			
Group D	20	20				
Daycare	20	20	58.0081(14)			
Group E Educational	20	20	(a), F.A.C.			

#### **Measurement of Dead End Corridors**

**General:** A dead end exists where an occupant enters a corridor thinking there is an exit at

the end and, finding none, is forced to retrace the path traveled to reach a choice of egress travel paths. Although relatively short dead ends are permitted by FBC, it is better practice to eliminate them whenever possible, as they increase the danger

of persons being trapped in case of fire. [Rule 69A-58.0081(14)(a), F.A.C.]

**Dead-End Limit:** The distance of a dead end is measured from the most remote point of a dead end

to where an occupant has a choice of direction of travel or to the centerline of an

exit door.

## Plan Schematic 1 Example Dead End Corridors

**Corridor 1:** The dead end corridor exists from the uppermost portion of the corridor to the

centerline of the stair door. The doors from Corridor 2 swing into Corridor 1

eliminating Corridor 2 as a possible second means of egress.

**Corridor 2:** Corridor 2 is classified as a dead end corridor because the doors between Corridor

2 and Corridor 3 swing into Corridor 2. The occupants in Corridor 2 have a choice

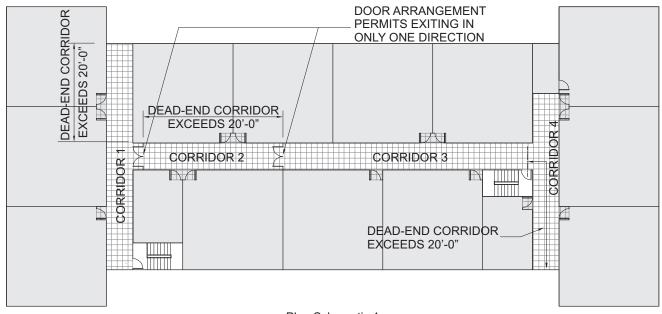
of only one direction to egress.

Corridor 4: The dead end corridor exists from the lower most portion of the corridor to the

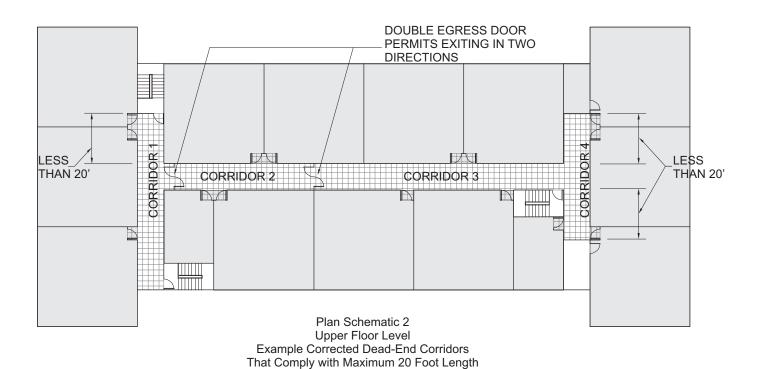
centerline of the exit stair.

### Plan Schematic 2 Example Dead End Corridors

In this example the dead end corridors have been corrected to be less than 20 feet in length. The doors separating Corridor 2 from Corridors 1 and 3 have been made to swing in both directions allowing the occupants of the corridor to have a choice of direction to reach an exit.



Plan Schematic 1 Upper Floor Level Example Dead-End Corridors That Exceed Maximum 20 Foot Length Requirements



### **DEAD END CORRIDORS**

Requirements

Emergency-Rescue Openings							
0	Uns	prinklered Bui	ding	Sprinklered Building	Reference		
Occupancy Classification and Location	Minimum Net Clear Opening	Minimum Net Clear Area of Opening	Maximum Sill Height				
Group D Day-care  Every room or space greater than 250 sq ft used for classroom or other educational purposes or normally subject to client occupancy, other than bathrooms, shall have not less than one outside window for emergency rescue when a door opening directly to the exterior is not provided.	20 inches wide, 24 inches high	5.7 sq ft	44 in	Not Required	FFPC NFPA 101 17.2.11.1		
Group E Educational  In buildings of three stories or less:  All spaces with an occupant load of six or more students where a door opening directly to the exterior is not provided.	20 inches wide, 24 inches high	5.7 sq ft	44 in	Not Required	FFPC NFPA 101 15.2.11.1		

#### Window and Panel Assemblies Serving as Emergency Escape and Rescue Openings

Latching Device: Operated from not more than 54 inches above the floor and operable by a single

motion without the use of tools. If a security/storm screen or grille is installed on the outside of the assembly, a single release device for both the emergency rescue opening and security/storm screen grills shall be operable from the inside by a single motion without the use of tools (FFPC NFPA 101 Chapter 15.2.11.1).

Signage: Emergency rescue windows shall be identified by permanent signage as stated

below and the release device shall be readily identifiable.

Permanent identification at each emergency escape or rescue opening stating:

"EMERGENCY RESCUE - KEEP AREA CLEAR" [Rule 69A-58.0081(11)(a)-(b), F.A.C.].

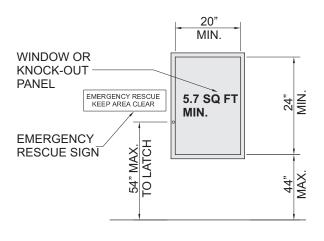
#### Door Serving as Emergency Escape and Rescue Openings Must Address the Following:

On Ground Level: Door opens directly to an exterior corridor or public way.

Above Ground Level: Door opens directly to an exterior corridor or balcony leading directly to a stairway.

Exterior corridor or balcony shall have open rails and shall be open to the exterior

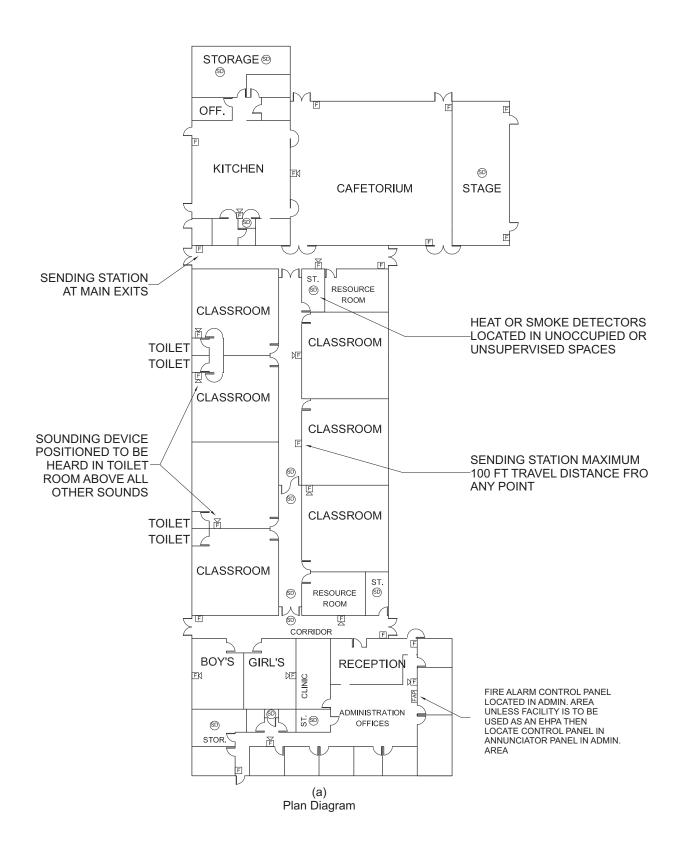
air.



(a)
Window or Knock-out panel serving as an emergency rescue opening

#### **EMERGENCY RESCUE OPENINGS**

	Fire Alarm						
	All systems to be installed in educational facilities shall be in	Reference					
General Manual Fire Alarm Systems	accordance with the 2010 Florida Fire Prevention Code and the National Fire Alarm Code NFPA 72 and shall meet the accessibility requirements of the Florida Building Code, Accessibility.  Manual fire alarm pull stations shall be located no more than five (5) feet from the entrance to the exit. This includes each individual classroom that opens to the exterior.  Manual fire alarm pull stations may be omitted in a building provided it meets all of the exemptions listed in the Florida Fire Prevention Code NFPA 101 Chapter 15.3.4.2.3	FFPC NFPA 101 15.3.4 FFPC NFPA 101 9.6.2.3					
Zoning	Each floor shall be zoned separately.  No one zone may exceed 15,000 sq. ft.  A zone indicator panel shall be located at grade level at the normal point of fire department access or at a constantly attending building security control center						
Alarm Indicating Appliances	Visible alarm indicating appliances in public and common areas.  Automatically activated by all of the following where provided:  1. Smoke detectors.  2. Sprinkler water-flow devices.  3. Manual fire alarm boxes.  4. Other approved types of automatic fire detection device suppression systems.  Audible alarms:  1.Shall provide a distinctive sound which shall not be used for any other purpose.  2. Sound pressure of 15 dBA above average ambient sound level in every occupied space within the building.  3. Minimum 60 dBA, Maximum 130 dBA.  Visual alarm:  Minimum candela level of 75 regardless of location.	FFPC NFPA 101 9.6.2.1 FFPC NFPA 101 9.6.3					
Automatic Fire Detection	Approved single-station or multi-station smoke detectors shall be installed in accordance with NFPA 72.						
Testing	Upon completion of the fire alarm system, all alarm indicating devices and circuits, alarm indicating appliances and circuits, supervisory signal initiating devices and circuits, signaling line circuits and primary and secondary power supplies shall be subjected to a 100 percent acceptance test in accordance with NFPA 72.	FFPC NFPA 101 9.6.1.3					



FIRE ALARM SYSTEMS

## SITE REQUIREMENTS



FIRE SAFETY EVALUATION SYSTEM INSTRUCTION September 19, 2000, Amended June 28, 2001,

#### Introduction

This Fire Safety Evaluation System is an alternative to Section 4A-58.008, Florida Administrative Code. Its use is therefore not mandatory but should be completed at the request of the affected school district. The term "shall" is used herein to indicate that if these provisions are applied, the procedures mandated are to be followed to ensure the effectiveness of the evaluation system.

The Fire Safety Evaluation System is a measuring system. It compares the level of safety provided by an arrangement of safeguards that may differ from those specified in Section 4A-58.008, Florida Administrative Code, to the level of safety provided in a building that conforms exactly with the details of the Code.

The use of this Fire Safety Evaluation System is designed and intended to be used for evaluating existing educational occupancies (through the 12th grade). It is not designed or intended to be used for evaluating day care centers (unless they are an incidental use within an educational occupancy).

#### **Procedure for Determining Equivalency**

Evaluate the factor's affecting either every fire zone, or the building as a whole using the "Fire Safety Evaluation Worksheets" (Parts 1 through 5).

Zoning must divide the building into units that consist of one or more complete fire/smoke zones.

A Fire/smoke zone is a portion of a building that is separated from all other portions of the building by building construction having at least a 1 -hour fire resistance rating or smoke partitions conforming to the requirements of Section 8.2.4 of NFPA 101(2000 ed.).

Any vertical openings (shafts, stairs) involved also must provide 1-hour separation with opening protected by 45 minutes fire resistance doors. In facilities- completely protected by automatic sprinkler protection, these fire resistance requirements do not apply. The elements separating one zone from another, must be of smokeresisting construction with self-closing doors or the doors equipped with automatic closers operated by smoke detectors.

Zones shall be permitted to be either adjacent to each other (e.g., separate wings or building sections) or above each other (e.g., floors or groups of floors).

Select and circle the safety value for each parameter in Part 1 that best describes the conditions in the facility or the zone being evaluated.

Each of the safety parameters are to be analyzed, and the safety value for each parameter that best describes the condition in the building is to be identified. Only one value for each of the parameters is to be chosen. If two or more values appear to apply, the one with the lowest point value governs.

Using the "FACILITY FIRESAFETY REQUIREMENT WORKSHEET" (Part-5), determine the acceptability of the general building systems (utilities; HVAC; elevator installations; and rubbish chutes, incinerators, and laundry chute installations).

Equivalency is achieved if the building or fire/smoke zone evaluations show equivalency or better in each and every zone and the requirements of the "FACILITY FIRESAFETY REQUIREMENT WORKSHEET" (Part- 5) are met.

#### Glossary for Fire Safety Evaluation Worksheet for Educational Occupancies

Introduction. This glossary is provided to assist in completing the "Fire Safety Evaluation Worksheet for Educational Occupancies." This glossary provides expanded discussion and definitions for various items in the worksheet to assist the user where questions of definition or interpretation arise. To the maximum extent possible, the glossary does not repeat the definitions already existing in NFPA 101, Life Safety Code (2000 ed.).

#### **Step I - Identify Hazardous Areas**

In order to determine segregation of hazards, hazardous areas need to be identified. A hazardous area is any space or-compartment in which a hazardous activity or storage of flammable or readily combustible products exists that possesses the potential for producing a fully involved fire. Examples of these types of areas in typical educational occupancies include the following: (a). Chemistry Laboratories, (b). Chemistry Storage Rooms, (c). Shops and Industrial Technology Areas (such as vehicle repair shops, wood shops, metal shops, welding shops and similar uses), (d). Storage and receiving areas for large quantities of combustible materials, (e) Boiler rooms and heating plants, (f) Areas used for the storage of flammable liquids or liquid-fueled vehicles. Ref. NFPA 101 (2000 ed.) Section 6.2, NFPA 1 Sec. 2-1.77.

#### Step 2 - Determine the Fire Protection Provided

The parameter value for hazardous areas is based on the presence or absence of the fire protection necessary to control or confine the hazard. Two different types of fire protection are considered. The first consists of automatic sprinklers or other appropriate extinguishing systems covering the entire hazard. The credit for sprinklers shall not to be given unless the hazardous area is separated from the rest of human occupancy or the egress route by reasonably smoke-resistant partitions and doors. The second is a complete fire enclosure having a sufficient fire resistance rating to contain the potential fire severity of the hazardous area. This includes the following: (a) The separation of the hazardous area from any structural framing members, (b) Partitions separating the hazardous area from all other spaces, and (c) Fire protection rated doors sufficient to exceed the potential of the fire load involved. Any hazardous space that has any of these protection systems is classified as having single protection.

#### **Step 3 - Determine Degree of Deficiency and Assign Parameter Values**

The parameter value ultimately is determined by the degree of the deficiency of the hazardous area based on the level of protection needed.

In some situations, more than one hazardous area with the same or differing levels of deficiency exists. The overall charge is based on the single most serious deficiency for the hazardous area.

#### Hazard Protection\_Table

	No protection	Sprinkler protection	Sprinkler protection Fire resistance-rated enclosure		
Not structurally Endangering	Single deficiency	No deficiency			
Structurally Endangering	Double deficiency	Single deficiency	Single deficiency	No deficiency	

#### **Vertical Openings**

These values apply to vertical openings and penetrations including exit stairways, ramps, and any other vertical exits, pipe shafts, ventilation shafts, duct penetrations, and laundry and incinerator chutes. The charge for vertical openings is based on the fire resistance of the enclosure, if provided. Ref. NFPA 101 (2000 ed.) Sections 4.5.5 and 8.2.5.

A vertical opening or penetration is classified as open if it is: (a) Unenclosed; (b) Enclosed but has doorways (or similar portals) that are without doors; (c) Enclosed but has unprotected openings other than doorways; and (d) Enclosed with cloth, paper, or similar materials without any sustained fire stopping capabilities.

The credit for vertical opening protection varies depending on the number of stories connected by the vertical opening and the degree of enclosure.

#### **Sprinklers**

Where an automatic sprinkler is installed for either total or partial building coverage, the system shall be in accordance with the requirements of NFPA 13, Standard for the Installation of Sprinkler Systems. Ref. NFPA 101, (2000 ed.) Section 9.7 and NFPA 1(2000 edition) Section 7-3.

To receive credit for protection, the sprinkler system must be equipped with an automatic alarm initiating device that activates the building's fire alarm system or otherwise sounds an alarm sufficiently audible to be heard in all occupied areas.

To receive credit for "total building" sprinkler protection, the entire building must be provided with sprinkler coverage and must cover all zones of the building.

#### **Fire Alarm**

Fire alarms are discussed in Section 9-6 of NFPA 101 (2000 ed.). An operating and functional Fire Alarm system is a **required** item for Educational Facilities.

Manual System Only - There is a fire alarm system that meets the requirements for manual fire alarm initiation of Section 9-6 (NFPA 101, 2000 ed.).

Manual With Detection in Hazardous Areas - There is a manual fire alarm system with automatic detection in hazardous areas such as boiler rooms, shops, laboratories, kitchens, laundry rooms, and storage rooms.

Manual With Detection and Fire Department Notification - There is a fire alarm system that complies with the requirements of the previous paragraph, and, in addition, automatically transmits a signal to the fire department that is committed to serve the area in which the building is located through a direct connection, an approved central station, or through other acceptable means.

#### **Smoke Detection**

All references to detectors herein refer to smoke detectors. No credit is given for heat detectors in habitable space except as specifically noted in this section. Heat detectors can be credited in the following two situations: (a). Uninhabitable spaces where ambient temperatures can be expected to reach 120\*F (50'C) or fall below O\*F (-180C), provided separation from inhabited spaces is at least 20-minute fire resistance-rated, (b). Hazardous areas where particles of combustion may normally be present such as kitchens, chemistry laboratories, and industrial technology areas. Ref. NFPA 101 (2000 ed.) Section 9.6.2 and NFPA 1 (2000 ed.) Section 7-7.4.

To meet the requirements for smoke detector coverage, the spaces must be provided with smoke detectors installed in accordance with NFPA 72, National Fire Alarm Code.

Only those detectors whose activation will sound the alarm throughout the zone of origin are to be credited in this parameter.

If the building is evaluated by zones, the evaluation is based solely on detection within the zone.

In order to receive credit for smoke detection in corridors only, all corridors in the building or zone must have smoke detectors.

#### **Interior Finish**

Classification of interior finish is based on the flame-spread rating of the interior finish tested in accordance with NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials. The requirements apply to wall and ceiling finish materials.

No consideration is included in the safety parameter value for any finish with a flame-spread rating of more than 200 or for any finish not rationally measured by NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials. Thus, this FSES should not be used where such conditions exist. Such materials include foamed plastics, asphalt-impregnated paper, materials that melt, drip, or delaminate, or those capable of inducing extreme rates of fire growth and rapid flashover. In any case where these materials are involved, the resultant risk is considered beyond the capacity of this evaluation system and requires individual appraisal.

Any interior finish having a flame spread of 75 or less that is protected by automatic sprinklers is evaluated as having a flame spread not exceeding 25. Any interior finish having a flame spread of more than 75 but not more than 200 that is protected by automatic sprinklers is evaluated as having a flame spread not exceeding 75.

#### **Exit Access**

The charge for dead-end access is made where any corridor affords access in only one direction to a required exit.

If dead-end distances exceed 50 ft (15 in), a separate analysis must be made to evaluate the potential of flashover of any spaces that could block egress from the dead end and to determine the potential rate of

smoke filling of the egress system involved. If the safe time is shorter than the expected egress time, the evaluation should be discontinued unless a corrective action is specified.

The 50-ft (15-m) dead-end limit is applicable to existing buildings or new fully sprinklered buildings. A value of 20 ft (6 in) should be used for other new buildings.

Any system with common path of travel in excess of that permitted by NFPA 10 1 should be considered deficient under Safety Parameter 9, "Exit(s)."

#### Exit(s)

Exit(s) are the paths of travel from a room to the outside using any types and arrangements described in Chapter 7 (NFPA 101 2000 ed.)

Single Route. A single route exists where occupants on any floor do not have either a direct exit or multiple routes.

Multiple Routes. Multiple routes exist where the occupants on a floor have a choice of two separate means of egress routes to the outside using the permitted types in Chapters 14 and 15 (NFPA 101).

Common path of travel- Multiple Routes. An exit route is deficient if it fails to meet any of applicable criteria of NFPA 101, Life Safety Code, including capacity. Any system with common path of travel in excess of that permitted by NFPA 101 (75 ft. unsprinklered, and 100 ft. sprinklered) should be considered deficient under Parameter 9, "Exit(s)".

Smokeproof Enclosure. Credit for a smokeproof enclosure shall be permitted to be given for a stairway designed and tested in accordance with the requirements of 7-2.3 (NFPA 101, 2000 ed.) for a smokeproof enclosure. To receive credit for a smokeproof enclosure, all exit stairs credited in Safety Parameter 9, 'Exit(s)" and Safety Parameter 8, "Exit Access," shall meet the smokeproof enclosure requirements.

Direct Exit. To be credited for direct exits, each room shall have within that unit a door that opens to the exterior at grade level or onto an exterior balcony with direct access to an exterior exit. Where such openings are directly onto grade in a location where any person egressing can move directly away from the building without further exposure, the credit for direct exit shall be given even if there are no other exit routes from the space.

#### **Corridor/Room Separation**

The values assigned in Safety Parameter 10, "Corridor/Room Separation," are based on the quality of separation between the room and the corridor. For purposes of this evaluation, corridor separation in new buildings is considered as complete (i.e., 1 hour with door closer) if it meets the requirements of 15.3.6 (NFPA 101, 2000\_ed.) or its exceptions.

For areas within educational occupancies that use an "open-plan" concept where all of the classrooms exit through an intervening space (such as a Media or Activity Center), a separate evaluation is recommended that calculates fuel loading and available safe egress time.

Corridor/room separation is defined in the following paragraphs.

No Separation Exists or Multiple Penetrations. The separation is judged to be non-existent if there is no corridor leading to an exit, there are no barriers against smoke or fire spread, there are no doors between corridors and adjacent rooms, or there are multiple penetrations. Examples of penetrations include transfer grills for air movement, transoms, and non fire-rated glass.

Incomplete. The separation is judged as "incomplete!' if the wall to the corridor has some unprotected openings (louvers, gaps, or transfer grills) between the floor and ceiling but these openings are minor in relation to the area of the room or they are located low in walls or doors. If openings exist above the ceiling level, the separation is considered complete if the ceiling in the room is a completed membrane. In this case, the separation rating is based on the level of resistance involved in the wall/ceiling system.

Solid Core Doors. This parameter should be used if the corridor/room doors are solid core wood or metal, doors at least I 1/2inches thick.

Doors with 20 Minute or Greater Fire Protection Rating. Use this parameter if doors and frames are fire-rated for 20 minute or greater protection but are not self-closing or automatic closing. This includes doors that are rated, that have closers, but are being held, propped or wedged open.

#### **Procedure for Computing Individual Safety Evaluations:**

Transfer each of the 10 circled safety parameter values from Part 1\_to the unshaded blocks corresponding to each safety parameter in Part 2.

Add the three columns, keeping in mind that any negative numbers need to be deducted.

Transfer the resulting values for S 1, S2, and S3 to Part 4.

#### **Determine Mandatory Requirements**

Circle the mandatory values in Part 3 for the building being evaluated.

Transfer the circled values from Part 3 to the boxes marked Sa, Sb, and Sc in Part 4.

#### **Equivalency Evaluation**

As indicated in Part 4, subtract the mandatory values for "Required Control ... .. Required Egress," and "Required General Fire Safety" from the respective "provided" values calculated in Part 2. Enter the difference in the appropriate boxes.

For each row check "yes" if the value in the answer box is zero (0) or greater. Check "no" if the value in the answer box is negative.

The safety parameters identified in Part 1 cover a majority of the considerations necessary to evaluate equivalent fire safety. However, some considerations are not evaluated by this method. These are treated separately in Part\_5. Complete Part 5 by checking the appropriate box for each item.

#### **Equivalency Conclusions**

If all of the checks in Part 4 are in the "yes" column and the considerations identified in Part 5 are met, the level of fire safety is at least equivalent to that prescribed for general purpose buildings.

If one or more of the checks in Part 4\_are in the "no" column, or some or all of the items in Part 5 are not met or some combination of these results, the level of fire safety is not determined, by this system, not to be equivalent to the life safety requirements of NFPA 101, Life Safety Code (2000 ed.).

SAFETY PARAMETERS	PARAMETER VALUES												
1, CONSTRUCTION		Combustible							Non	combustib	le		
Florida Building Code		V		ype IV		Type III			Type II		Type II		/pe I (443)
Construction Types.	(000)	(000) 01 (111)		(2HH)	(2110			(000)		(111)		(332) Type (222)	
1 Story	1	2		2		1	2		1		2		2
2 Stories	0	1		1		0	1		0		1		2
3 Stories	-1	0		0		-1	0		-1		0		2
4 Stories	-2	-1		-1		-2	-1		-2		-1		2
2. SEGREGATION OF HAZARDS			exposed to E	Exit				Ėxi			No De	ficie	ncies
		uble iency	Single Deficie	ncy		Doubl	e Def	-	Single D	ef			
	-	7		-4			-4		0			0	
3. VERTICLE OPENINGS	Open	(or inco	omplete end	losure)	)				Enclosed			Sir	ngle Story
	Conne	ects	Connect	Conn	ect	Smo	oke	3	0 Minutes	>	1 Hour		
	4 or m		s 3	s		Resis		t	o 1 Hour				
	Stori	es	Stories	2		or <							
				Stori		Mi							
	-10		-6	-2		1			2		4		0
4. SPRINKLERS				Par						Com	plete Build	ing	
			Hazard			)ccupi			O. 1				
	Non	е	Area			reas b			Standard		Quick Response		sponse
			Only or Pr			acking							
							Jnoccupied						
			Only		Areas (Attics)								
	0					6			10		12		
5. FIRE ALARM	·	al Svete	m Only	M			\/\/ith	With Heat Detection and Fire					
(REQUIRED)	Iviarius	ai Oysic	, I						partment Notification				
(NEGONIES)			Delecti			Areas				-			
		2			4			6					
6. SMOKE DETECTION	Non	е	Hazardo	us Are	Areas Only		Corridors			Complete Building			
	0			1		2			4				
7. INTERIOR FINISH IN EXIT ROUTES (Flame	;	> 75 to	<u>&lt;</u> 200		> 25 to <u>&lt;</u> 75				<u>&lt;</u> 25				
Spread Rating)		-3	}		-1				0				
8. EXIT ACCESS	Max.	Dead E	End Length				No E	Dead	d Ends > 2	20'. ar	nd Travel is	3	
	> 35' to 5	50' >	20' to < 35'	>	200' to	o 300'	>	100	' to 200'	>	> 50' to 100	)'	<u>&lt;</u> 50'
	-2		-1		-	-1		0			1		3
9 EXIT(s)	Interio		Interior	corrido	rN	lore T	han C	ne	Way Out				
	Corridor		Deficient			Not			mokeproc	of		Direc	et
	Only Or		20			ficient			inclosures			Exi	
	Way Out			25510111									
	-6		-2			0			3			5	
10. CORRIDOR TO ROOM	No			Se	parati	ion Ex			e Level of			1	
SEPARATION	Separati								With <u>&gt;</u>		with <u>&gt;</u> 20		rect Exit to
	Exist o		Incomplete	e   ;	Solid (		20		nutes		n. FPR &	th	e Outside
	Multiple				Do	or		FF	'K		elf/Auto	1	
	Penetrat	1011								С	losure.		
	S											1	_
	-6		-2		1			2	2		4		0

## **INDIVIDUAL SAFETY EVALUATION**

Safety Parameters	Fire Control (S1)	Egress Provided (S2)	General Fire Safety Provided (S3)
1. Construction			
2. Segregation of Hazards			
3. Vertical Openings			
4. Sprinklers			
5. Fire Alarm			
6. Smoke Detection			
7. Interior Finish			
8. Exit Access			
9. Exit Systems			
10. Corridor/Room Separation			
Total	S1 =	S2 =	S3=

### MANDITORY REQUIREMENTS

Building Height	Control Requirement (Sa)	Egress Requirement (Sb)	General Fire Safety (Sc)
1 Story	0	0	0
2 Stories	0	0	0
3 Stories	2	2	2
> 3 Stories	3	4	3

## FLORIDA SCHOOL EVALUATION SYSTEM PART 4

#### **EQUIVALENCY EVALUATION**

		PASS	FAIL
Control Provided (S1) minus Required Control (Sa) +/= 0	=		
Control Provided (S2) minus Required Egress (Sb) +/= 0	=		
General Fire Safety (S3) minus Required Gen. Fire Safety (Sc) +/= 0			

#### FACILITY FIRESAFETY REQUIREMENT WORKSHEET

Considerations Systems conform to the requirements of the State Requirements for Educational Facilities	Met	Not Met	Not Applicable
A. Building utilities			
B. Air conditioning, heating and ventilation			
C. Elevators			
D. Rubbish chutes, incinerators and laundry chutes			
E. Fire Drills			
F. Fire Alarm System			

ABOVE REQUIREMENTS MUST BE MET BEFORE OCCUPANCY IS APPROVED

Section 5	K-12	College	Ancillary
5. Existing Facilities	X	X	X
5(1) Administration	X	X	X
5(1)(a) Annual Firesafety, Casualty Safety, and Sanitation Inspections	X	X	Х
5(1)(a)1. Annual Firesafety Casualty Safety, and Sanitation Inspection	X	X	X
Reports 5(1)(a)2. Annual Firesafety Inspections	Х	Х	X
		X	
5(1)(a)3. Annual Casualty Safety and Sanitation Inspections	X	X	X
5(1)(b) Inspections by Other Agencies 5(1)(c) Existing University and the Florida School for the Deaf and the Blind	^	^	^
Facilities	N/A	N/A	N/A
5(1)(d) Maintenance and Operations of Existing Educational Facilities	Х	Х	X
5(1)(d)1. Annual Maintenance Permits	Х	X	Х
5(1)(d)2. Maximum Project Limits	Х	X	X
5(1)(e) Board Policies	Х	X	X
5(1)(e)1. Correction of Deficiencies	Х	X	X
5(1)(e)2. Operating Communicable Disease Control Program	Х	X	X
5(1)(e)3. Work Areas that to Comply with OSHA 29 CFR	Х	X	X
5(1)(e)4. Firesafety Training	Х	X	X
5(1)(e)5. Operating Pest Management Programs	Х	X	Х
5(1)(e)6. Hazardous Waste Regulations	Х	X	X
5(1)(e)7. Safety Checklist Program for Schools (NIOSH)	Х	Х	N/A
5(1)(e)8. Cleaning and Servicing Occupied Facilities	Х	X	Х
5(1)(e)9. Housing Animals	Х	N/A	N/A
5(1)(e)10. Ensuring Adult Supervision of Supplies	Х	N/A	N/A
5(1)(e)11. Designating Persons Authorized to Use External Defibrillators	Х	Х	X
5(1)(f) Remodeling and Renovation	X	Х	Х
5(1)(g) Floor Plans	X	Х	Х
5(1)(h) Returning Facilities to Instructional Use	X	Х	N/A
5(1)(i) Abandoned Facilities	Х	Х	X
5(2) Site	Х	Х	X
5(2)(a) Landscaping	Х	X	Х
5(2)(b) Exterior Signage	Х	X	X
5(2)(c) Flag Poles	Х	X	X
5(2)(d) Fencing	Х	X	Х
5(2)(d)1. Play Areas and Athletic Fields	Х	X	N/A
5(2)(d)2. Pre-K, Kindergarten, and Day-care Play Areas	X	(1)	(1)
5(2)(d)3. Mechanical, Plumbing, and Electrical Equipment	X	X	N/A
5(2)(d)4. Special Hazards	X	(1)	(1)
5(2)(d)5. District Warehouse, Maintenance and Bus Compounds	N/A	N/A	X
5(2)(d)6. Barbed Wire	X	X	Х
5(2)(d)7. Fencing and Gate Materials	X	X	X
5(2)(d)8. Footings and Foundations	X	X	X
5(2)(d)9. Fencing and Gate Locations	X	X	X
5(2)(d)10. Fence Maintenance	X	X	X
5(2)(e) Guy Wires	X	X	X
5(2)(f) Walks, Roads, Drives, and Parking Areas	Х	X	X
5(2)(f)1. Paving	Х	X	X
5(2)(f)2. Paved Area Surfaces	X	X	X
5(2)(f)3. Striping and Maintenance	X	X	X
5(2)(f)4. Positive Drainage	X	X	X
5(2)(f)5. Cleaning	Х	X	X
5(2)(f)6. Vehicular/Pedestrian Interface	Х	X	Х
5(2)(f)7. Walks/Accessible Routes	Х	Х	Х
5(2)(f)8. Roads and Streets	Х	X	N/A
5(2)(f)9. Bus Drives	Х	X	Х
5(2)(f)10. Vehicle Parking Areas	Х	Х	X
5(2)(f)11. Bicycle Parking Areas	Х	Х	N/A
5(2)(g) Lighting	Х	Х	X

Section 5	K-12	College	Ancillary
5(2)(h) Transmission Line Right-of-Way	Х	Х	Х
5(2)(i) Stormwater Drainage	X	Χ	X
5(2)(j) On-Site Wells and Sewage Systems	Х	Х	Х
5(2)(k) Playgrounds, Equipment and Athletic Fields	X	Χ	N/A
5(2)(k)1. Fencing	X	Х	N/A
5(2)(k)2. Pre-K, Kindergarten, or Day-care Play Areas	X	(1)	(1)
5(2)(k)3. Direct Access	X	(1)	(1)
5(2)(k)4. Athletic and Playground Equipment	X	X	(1)
5(2)(k)5. Ground Under Playground Equipment	Х	(1)	(1)
5(2)(k)6. Covered Play Areas	X	(1)	(1)
5(2)(k)7. Related Facilities	X	X	(3)
5(2)(k)8. Accessibility	Х	Х	(3)
5(2)(I) On-Site Waste Burners	Х	Х	Х
5(3) Concrete	Х	Х	Х
5(3)(a) Structural Members	Х	Х	Х
5(3)(b) Concrete Poles and Furniture	Х	Х	Х
5(3)(c) Walks and Drives	Х	Х	Х
5(3)(d) Concrete Parking Structures	Х	Х	Х
5(4) Masonry	X	X	X
5(5) Metals	X	X	X
5(5)(a) Structural Steel	X	X	X
5(5)(b) Poles and Furniture	X	X	X
5(5)(c) Parking Structures	X	X	X
5(6) Wood	X	X	X
5(6)(a) Fire Retardant Treated Wood (FRTW)	X	X	N/A
5(6)(b) Structural Members	X	X	X
5(6)(c) Handrails and Ramps	X	X	X
5(6)(d) Chemical Treatment	X	X	X
5(6)(e) Built-ins and Casework	X	X	X
5(6)(f) Wood Floors	X	X	X
5(7) Insulation and Moisture Protection	X	X	X
5(7) Insulation and Moisture Protection  5(7)(a) Thermal Insulation	X	X	X
( ) ( )	X	X	X
5(7)(b) Vapor Barriers	X	X	X
5(7)(c) Roofing 5(8) Doors and Windows	X	X	X
5(8)(a) Doors and Windows	X	X	X
5(8)(b) Doors	X	X	X
5(8)(b)1. Doors Opening into Interior Corridors	X	X	X
5(8)(b)2. Storefront Doors	X	X	X
5(8)(c) Hardware	X	X	X
5(8)(c)1. Locksets	X	X	N/A
5(8)(c)2. Door Closers	X	X	X
5(8)(c)3. Manual Hold-Open Devices	X	X	X
5(8)(c)4. Accessible Hardware	X	X	X
5(8)(c)5. Thresholds	X	X	X
5(8)(d) Glazing	X	X	X
5(8)(d)1. Hazardous Locations	X	X	X
5(8)(d)2. Glazed Panels Subdivided	X	X	X
5(8)(d)3. Other Interior Glazing	X	X	X
5(8)(d)4. Exterior Glazing	X	X	X
5(8)(e) Windows	X	X	Х
5(9) Finishes	Х	Х	Х
5(9)(a) Interior Finish General Requirements	X	Х	Х
5(9)(a)1. Wall or Ceiling Finishes	Х	X	X
5(9)(a)2. Interior Finishes	Х	X	Х
5(9)(b) Ceilings	Х	X	X
5(9)(b)1. Impervious Ceilings	Х	X	X
5(9)(b)2. Ceiling Free of Carpet	X	X	X
[ - (-)(-)	L	· · · · · · · · · · · · · · · · · · ·	

Section 5	K-12	College	Ancillary
5(9)(c) Walls	X	X	X
5(9)(d) Floors	X	X	X
5(9)(d)1. Interior Floors (Nonslip) 5(9)(d)2. Interior Floors (Even and Level)	X	X	X
5(9)(d)3. Interior Floors (Even and Level) 5(9)(d)3. Interior and Exterior Means of Egress	X	X	X
5(9)(d)4. Floors (Nonslip Impervious)	X	X	X
5(9)(d)5. Individual Toilet Rooms	X	X	X
5(9)(d)6. Sealed Concrete Floors	X	X	X
5(9)(d)7. Ramps and Stairs	X	X	X
5(9)(d)8. Clinics and Food Service Areas	X	X	X
5(9)(e) Acoustics	Х	Х	N/A
5(10) Specialties	Х	Х	Х
5(10)(a) General Safety Requirements	X	X	X
5(10)(a)1. Safety Lines	X	X	X
5(10)(a)2. Roofed Stairs and Balconies	X	X	X
5(10)(a)3. Exterior Corridors or Balconies	X	X	X
5(10)(a)4. Space Under Stairs and Ramps	X	X	X
5(10)(a)5. Floor Elevation Difference	X	X	X
5(10)(a)6. Exit Ramps 5(10)(a)7. Ramps Required	X	X	X
5(10)(a)8. Handrails	X	X	X
5(10)(a)9. Stair Treads and Landings	X	X	X
5(10)(a)10. Interior Stairs, Exterior Stairs and Smoke-Proof Towers	X	X	X
5(10)(b) Potential Hazards	X	X	X
5(10)(c) Separation of Spaces	X	X	X
5(10)(d) Marker Boards and Tackboards	X	X	N/A
5(10)(e) Toilet Partitions	X	X	X
5(10)(f) Toilet and Bath Accessories	Х	Х	Х
5(10)(g) Diaper Changing Stations	(1 & 3)	(1 & 3)	(1 & 3)
5(10)(h) Pest Control	X	X	X
5(10)(i) Interior Signage	X	X	X
5(10)(i)1. Permanent and Temporary Interior Signage	X	Х	X
5(10)(i)2. Interior Signage	X	X	X
5(10)(i)3. Hazardous Work and Storage Areas	X	Х	X
5(10)(i)4. Means of Egress, Capacity, Accessibility, Directional and Exit Information Signage	X	X	X
5(10)(i)5. Mounting Locations	X	Х	Х
5(10)(i)6. Internal Illumination	X	X	X
5(10)(i)7. Wall-Mounted Signs and Graphics	X	X	X
5(10)(j) Demountable Partitions	X	X	X
5(10)(k) Automated External Defibrillators	X	N/A	N/A
5(11) Équipment	X	Х	Х
5(11)(a) Fire Blankets	X	Х	X
5(11)(b) Vault Doors and Security Systems	Х	Х	X
5(11)(c) Waste Compactors and Destructors	X	X	X
5(11)(d) Waste Chutes and Collectors	X	X	X
5(11)(e) Residential Appliances	X	X	Х
5(11)(f) Built-In Cabinets and Casework	X	X	X
5(11)(g) Athletic and Recreational Equipment	X	X	N/A
5(11)(h) Shooting Range	X	X	N/A
5(11)(i) First Aid Kit 5(12) Furnishings	X	X	N/A X
5(12) Furnishings 5(12)(a) Hazardous Materials	X	X	X
5(12)(b) Freestanding Manufactured and Custom Casework	X	X	X
5(12)(c) Plastic Laminate	X	X	X
5(12)(d) Window Coverings	X	X	X
5(12)(e) Floor Mats and Grates	X	X	X
5(12)(f) Auditorium and Theater Seating	X	X	X
		1	1

Section 5	K-12	College	Ancillary
5(12)(g) Built-In Tables and Fixed Seating	X	X	X
5(12)(h) Furnishings and Equipment	X	X	X
5(13) Special Construction	X	X	X
5(13)(a) Accessibility Requirements	X	X N/A	X
5(13)(b) Ancillary Facilities	N/A X	N/A X	N/A
5(13)(c) Assembly Occupancies (within Educational Facilities) 5(13)(d) Auxiliary Spaces	X	X	N/A N/A
5(13)(e) Boiler Rooms	X	X	
\ /\/			X
5(13)(f) Child-Care/Day-Care Facilities	(1)	(1)	(1)
5(13)(g) Clinics (School)	X	(2)	N/A
5(13)(h) Clinics (Full-Service School Program)	N/A	N/A	N/A
5(13)(i) Clinics (Florida Colleges) 5(13)(j) Florida Colleges	N/A N/A	X	N/A N/A
5(13)(k) Dormitories		X	
5(13)(I) Energy Conservation	N/A X	X	N/A X
5(13)(m) Incinerators	X	X	X
5(13)(n) Stadiums, Grandstands, and Bleachers	X	X	N/A
5(13)(o) Kilns	X	X	N/A
5(13)(p) Kitchen and Food Service Facilities	X	X	X
5(13)(p)1. Toilet Rooms	X	X	X
5(13)(p)2. Staff Toilet Rooms	X	X	X
5(13)(p)3. Sinks	X	X	X
5(13)(p)4. Floor Drains	X	X	X
5(13)(p)5. Floor Drains 5(13)(p)5. Floor Drain Flushing	X	X	X
5(13)(p)6. Wastewater	X	X	X
5(13)(p)7. Garbage and Rubbish Rooms	X	X	X
5(13)(p)8. Openings to the Exterior	X	X	X
5(13)(p)9. Areas Where Odors Or Contaminants Are Generated	X	X	X
5(13)(p)10. Kitchen and Food Service Equipment	X	X	X
5(13)(p)11. Grease Traps	X	X	X
5(13)(q) Laboratories and Shops	X	X	X
5(13)(q)1. Science Rooms, Laboratories, or Shops	X	X	N/A
5(13)(q)2. Automotive Repair Shops	X	X	X
5(13)(q)3. Working Machinery	X	X	X
5(13)(q)4. Equipment Permanently Mounted	X	X	X
5(13)(q)5. Safety Zone Lines	X	X	X
5(13)(q)6. Master Control Valves or Switches	X	X	N/A
5(13)(q)7. Woodworking Areas	X	X	X
5(13)(q)8. Welding Shops	X	X	X
5(13)(q)9. Hazardous Work and Storage Areas	Х	Х	X
5(13)(r) Library and Media Centers	X	X	X
5(13)(s) Open Plan Schools	Х	Х	N/A
5(13)(t) Performing Arts Theaters and Auditoriums (Serving the Public)	Х	Х	X
5(13)(u) Pools	Х	Х	N/A
5(13)(v) Shade/Greenhouses	Х	Х	N/A
5(13)(w) Stages	X	X	X
5(13)(x) Storage	Х	Х	Х
5(13)(y) Time-Out Rooms	X	(3)	(3)
5(13)(z) Walk-In Coolers and Freezers	X	X	X
5(14) Relocatable Buildings	Х	Х	Х
5(14)(a) Annual Inspection of Existing Property Required	Х	Х	Х
5(14)(a)1. Board-Provided Inspections of Relocatables	Х	Х	Х
5(14)(a)2. Inventory/Date of Construction	Х	Х	Х
5(14)(a)3. Inspection Report	Х	Х	Х
5(14)(b) Standards for Existing "Satisfactory" Relocatable Classroom Buildings		X	N/A
5(14)(b)1. Construction Type	X	X	N/A
3(14)(b)1. Constituction type	/\		
5(14)(b)1.a. Noncombustible	X	X	N/A

Section 5	K-12	College	Ancillary
5(14)(b)2. Accessibility	X	X	X
5(14)(b)3. Sites/Master Plan	Х	Х	N/A
5(14)(b)3.a. Covered Walks	X	N/A	N/A
5(14)(b)3.b. Separation of Units	X	Х	Х
5(14)(b)3.c. Clusters of Relocatables	X	Х	Х
5(14)(b)3.d. Minimum Setbacks	Х	Х	Х
5(14)(b)3.e. Floodplain	Х	Х	Х
5(14)(b)4. Structure	Х	Х	Х
5(14)(b)4.a. Wind Uplift	Х	Х	Х
5(14)(b)4.b. Connections and Reconnections	Х	Х	Х
5(14)(b)4.c. Foundations	Х	Х	Х
5(14)(b)4.d. Foundation Standards for New Construction Apply When Moved	X	Х	Х
5(14)(b)4.e. Inspection	Х	Х	Х
5(14)(b)4.f. Tie-downs	X	X	X
5(14)(b)5. Fire-Retardant Wood	Х	Х	Х
5(14)(b)6. Roofing/Moisture Protection	Х	Х	Х
5(14)(b)7. Doors	Х	Х	Х
5(14)(b)8. Platforms	X	X	X
5(14)(b)9. Operable Windows	X	N/A	N/A
5(14)(b)10. Finishes	X	X	N/A
5(14)(b)10.a. Toilet Rooms	X	X	N/A
5(14)(b)10.b. Classrooms	X	X	N/A
5(14)(b)11. Child-Care/Teenage Parent Programs (TAP)	X	(3)	(3)
5(14)(b)12. HVAC	X	X	X
5(14)(b)13. Plumbing	X	X	X
5(14)(b)14. Electrical	X	X	X
5(14)(b)14.a. Illumination	X	X	X
5(14)(b)14.b. Technology	X	N/A	N/A
	X	X	X X
5(14)(b)15. Firesafety Systems 5(14)(b)16. Moving Relocatables	X	X	X
5(14)(b)17. Abandoned or Warehoused Relocatable Facilities	X	X	X
5(14)(b)17. Abandoned of Walehoused Relocatable Facilities 5(15) Conveying Systems	X	X	X
5(15)(a) Elevators 5(15)(b) Dumbwaiters	X	X	X
5(15)(b) Duffibwariers  5(15)(c) Vertical Platform Lifts and Inclined Wheelchair Lifts	X	X	X
5(15)(d) Vehicle Lifts	X	X	X
5(16) Mechanical	X	X	X
	X	X	X
5(16)(a) Ventilation	X	X	
5(16)(a)1. Windows, Louvers, Or Other Openings	X	X	X
5(16)(a)2. Mechanical Ventilation Systems			
5(16)(a)3. HVAC System	X	X	X
5(16)(a)4. Exhaust Systems 5(16)(a)5. Science Laboratories	X	X	N/A
( )()	X	X	
5(16)(a)6. Building Service Equipment			X
5(16)(a)7. Cooling Towers 5(16)(a)8. Walkway and Building Roofs	X X	X	X
5(16)(a)9. Energy Conservation Devices	X	X	X
5(16)(a)10. Exhaust	X	X	X
5(16)(a)11. Gravity and Wind-Operated Ventilators	X	X	X
5(16)(b) Plumbing	Х	X	X
5(16)(b)1. Toilet Facilities Maintenance	X	X	X
5(16)(b)2. Toilet Facilities Cleaning	Х	X	Х
5(16)(b)3. Toilet Facilities Accessibility	X	X	N/A
5(16)(b)4. Availability of Toilet Rooms	X	X	Х
	Χ	N/A	N/A
5(16)(b)5. Faculty and Staff Toilet Facilities		+	
5(16)(b)6. Unisex Toilet Rooms	Х	(1)	(1)
			(1) X X

Section 5	K-12	College	Ancillary
5(16)(b)9. Drinking Fountains	X	X	X
5(16)(b)10. Shower Facilities	X	X	Х
5(16)(b)11. Foot Baths	(3)	(3)	(3)
5(17) Electrical	X	X	Х
5(17)(a) Illumination	X	X	X
5(17)(a)1. Lighting Fixtures	X	Х	Х
5(17)(a)2. General Illumination	X	X	Х
5(17)(b) Power	X	X	Х
5(17)(b)1. Electrical Outlets	X	X	X
5(17)(b)2. Lighting and Power Controls	X	X	X
5(17)(b)3. Emergency Shut-Off Switches	X	X	N/A
5(17)(c) Site Lighting	X	X	X

- (1) If Child Care/Day Care Exists
- (2) If Vocational Program Present
- (3) If Included in Program

