2013 SOUTH CAROLINA SCHOOL FACILITIES PLANNING AND CONSTRUCTION GUIDE

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SOUTH CAROLINA DEPARTMENT OF EDUCATION

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An Equal Opportunity Agency

These regulations are updated on an annual basis. Public comments are welcomed. Your submittal must be written. It will be directed to the appropriate subcommittee for consideration. All submittals need to be received no later than March of the year to be considered by both subcommittee and the South Carolina Public School Facilities Committee for inclusion in the South Carolina School Facilities Planning and Construction Guide of the following year. Any entries beyond this deadline may not be timely for proper review for that year and will be deferred to the next year.

Please submit comments in written form either by mail or e-mail addressed to:

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DIVISION 1

GENERAL REQUIREMENTS

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SECTION 102 AUTHORITY

102.1 South Carolina Code Ann. §59-23-210 (Supp. 2009) requires all construction, improvement and renovation of public school buildings and property to comply with the latest standards and specifications set forth in the South Carolina School Facilities Planning and Construction *Guide* and requires that plans and specifications receive approval before bidding.

102.2 South Carolina Code Ann. §59-23-220 (Supp. 2009) requires the State Superintendent of Education or the superintendent's designee inspect all public school buildings before occupancy.

102.3 Section 6-9-110, Code of Laws of South Carolina, 1976, exempts school district facilities, reviewed and approved by the State Department of Education, from county, municipal or other local ordinances or regulations which require the purchase or acquisition of a permit, license, or other device utilized to enforce a building standard. However, it does not exempt the district from zoning ordinances.

SECTION 103 ACRONYMS AND DEFINITIONS

ADA American with Disabilities Act

ADAAG American with Disabilities Act Accessibility Guidelines

A/E The Design Professional of record for a given project

AHERA Asbestos Hazard Emergency Response Act

AIA American Institute of Architects

ANSI American National Standards Institute, Incorporated

ASCE American Society of Civil Engineers

ASHRAE American Society of Heating, Refrigeration & Air Conditioning

ASME American Society of Mechanical Engineers

Building Codes are a set of rules that specify the minimum acceptable level of safety for constructed objects such as building and nonbuilding structures as well as other manmade improvements. The applicable building codes for school construction in South Carolina are adopted from national consensus standards and are listed in Section 108 Basic Codes and Standards.

CATE Career and Technology Education

CEFPI Council of Educational Facility Planners International

Charter Schools are public schools and must comply with the requirements of this *Guide* including, but not limited to, plan review, inspection of renovation and construction and approval of occupancy.

Code See Building Codes

Construction Documents consists of the final drawings, specifications and bidding documents. See Section 204 Construction Document Submittal.

Construction is the means of the creation of something new, rather than repair or improvement of something existing.

CM/PM Construction Management/Program Management

Design Development Phase is the preparation of detailed preliminary drawings along with supporting data. See Section 203 Design Development Submittal.

District Delegated authorities of the applicable school district

FEMA Federal Emergency Management Agency

Final Completion is the date when the Design Professional declares that all work has been completed, all deficiencies corrected, and everything is acceptable in accordance with the contract documents.

FHBM Flood Hazard Boundary Maps

FIRM Flood Insurance Rate Maps

HVAC Heating, ventilation and air conditioning system or equipment

IBC International Building Code

ICC International Code Council

ICCPC International Code Council Performance Code

ICCGBC International Code Council Green Building Code

IEBC International Existing Building Code

IECC International Energy Conservation Code

IESNA Illuminating Engineering Society of North America

IFC International Fire Code

IFGC International Fuel Gas Code

IMC International Mechanical Code

IPC International Plumbing Code

IPMC International Property Maintenance Code

IPSDC International Private Sewage Disposal Code

IRC International Residential Code for One and Two Family Dwellings

IT Information Technology

IUWIC International Wildland – Urban Interface Code

IZC International Zoning Code

LEED Leadership in Energy and Environmental Design (LEED) /Other High Performance Standard Certification

MSL Mean Sea Level

NEC National Electrical Code, NFPA 70

NFIP National Flood Insurance Program

NFPA National Fire Protection Association

NGVD National Geodetic Vertical Datum

OSF Office of School Facilities, South Carolina Department of Education

OSHA Occupational Safety and Health Administration

Renovation is the means of the repair or improvement of something already existing (S.C. Attorney General Opinions, 1954 and 1968).

RFI Request for information

SCDHEC South Carolina Department of Health and Environmental Control

SCDNR South Carolina Department of Natural Resources

SCDOT South Carolina Department of Transportation

SCDSS South Carolina Department of Social Services

Schematic Design Phase is a study by the Design Professional of the project requirements, followed by the preparation of schematic design drawings with supporting data as outlined herein.

SCLLR Labor, Licensing, and Regulation

SMACNA Sheet Metal and Air Conditioning Contractors' National Association

Substantial Completion is the date all work or some designated portion, thereof, is certified by the Design Professional as being sufficiently complete, in accordance with the contract documents, so that people may safely occupy the workspace or a designated portion, thereof, for the use for which it is intended.

UL Underwriters Laboratories, Incorporated

SECTION 104 SCOPE OF OSF RESPONSIBILITY

104.1 The following are included within the requirements of this regulation and, therefore, are under the jurisdiction of the OSF regardless of the source of funding for the project.

104.1.1 Site inspections and approval prior to acquisition

104.1.2 All new structures, and additions and/or renovations or alterations to existing structures, in connection with the public education program in South Carolina, including student-related as well as non-student-related facilities

104.1.3 Existing school buildings once vacated and being placed back in service

104.1.4 Any existing building to be converted to an educational occupancy

104.1.5 Adjunct work related to the following facilities whether included as a part of an overall construction contract or awarded as a separate contract, unless otherwise waived by OSF

104.1.6 Site work and associated construction, including grading, paving, storm drainage, utilities, athletic facilities, stadiums and bleachers, press boxes, playing field lighting, and concession stands

104.1.7 Water supply and sewage disposal systems

104.1.8 Fixed equipment where plumbing, mechanical, or electrical systems, and/or the building structure must be modified such as security systems, technology systems and kitchen or science equipment.

104.1.9 Energy conservation equipment installations under energy savings contract when mechanical, electrical, and/or structural modifications are involved

104.1.10 Roofing projects when the membrane material is changed

104.2 The following are not included within the requirements of this regulation.

104.2.1 Carpet, curtains, furniture and portable equipment (such as for classroom and library furnishings, vocational shop equipment, etc.) not provided as a part of a construction or renovation project are excluded from the requirements of this regulation. The District is responsible for ensuring that all carpet, curtains, furniture and portable equipment meet the building code requirements for smoke development, flammability and flame spread for the location. The OSF is available to answer any questions the District or their vendors may have to determine material suitability.

104.2.2 The design and construction of "relocatable" classroom units addressed in the *South Carolina Minimum Specifications Guide for Relocatable Classrooms*.

104.3 The OSF will review for compliance with applicable building codes and regulatory or statutory requirements. Review of building code and regulatory or statutory requirements by the OSF must not relieve the design professional representing the district from code omissions as interpreted by the OSF.

104.3.1 Plan reviews may be done on a personal basis with the design professional, by request. School district representatives must be invited to attend such meetings.

104.3.2 After completing the review of design development drawings, written authorization will be given by the OSF to the District and copied to the design professional to proceed into the construction documents phase. The design professional assumes responsibility for any changes required if design proceeds without such authorization.

SECTION 105 SCOPE OF DISTRICT RESPONSIBILITY

105.1 The District is responsible for the procurement of design, construction and inspection services in accordance with its internal regulations

105.2 The District is responsible for the review and approval of program, budget, schedule, plans and specifications to ensure the project meets the design and programmatic intent established by the District.

105.3 The District is responsible for the coordination of work contracted directly with district such as furniture, road improvements, utility relocation, IT, telephone and security systems. All work contracted by the District must meet the requirements established by the *Guide* and may require review and approval by the OSF.

105.4 The District is responsible for the application and cost of permits as required by State and Federal laws and regulations. Refer to Section 109 Permits for additional guidance.

105.5 The District is responsible for ensuring that all asbestos and hazardous material testing is performed and abatement is completed prior to the start of any work.

105.6 The District is responsible for establishing requirements for record documents, operation and maintenance manuals and training at the completion of a project and ensuring that the design professional includes those requirements in the contract documents.

105.7 The District is responsible for all operational plans to be utilized such as fire safety and evacuation, full and modified lockdown and shelter in place. The plans should cover both hazardous weather as well as situations concerning safety and security.

SECTION 106 SCOPE OF DESIGN PROFESSIONAL RESPONSIBILITY

106.1 Design Professionals: There must be a design professional whose responsibility is to coordinate all design requirements throughout the entire construction project. This professional must be an architect and/or engineer registered to practice in South Carolina and must be designated as the prime contact for the OSF.

106.1.1 In certain types of projects, the principal design professional may be an engineer rather than an architect. For such projects, within the bounds of this *Guide*, where the term “architect” is used, it may refer instead to the principal design professional for the project.

106.1.2 The Design Professional must coordinate requirements for record documents, operation and maintenance manuals and training at the completion of a project for inclusion in the contract documents.

106.2 Other Design Professionals: Where the scope of a project is not architectural or engineering in nature, the services of an Design Professional are not required and the basic services of other Design Professionals may be used. These professionals must be under direct contract to the district. The preceding applies to professionals, such as landscape architects, roofing consultants, and kitchen planners acting as independent practitioners whose credentials are recognized by the OSF.

106.3 Construction/Program Management (CM/PM): Districts may employ a CM/PM as their agent. Contracts vary widely with regard to CM/PM project responsibilities. Regardless of the defined contractual responsibilities, the CM/PM must be an architect or professional engineer registered in South Carolina or a South Carolina licensed general contractor (building classification) with a cost of work limitations not less than the construction cost of the project.

106.4 Incidental Work: By joint resolutions of the South Carolina Architectural Registration Board and the Engineering Examiners' Board, dated July 25, 1962, it is permissible for an architect to perform work in the field of engineering if it is incidental to his practice of architecture, if it is of a minor nature and if he is qualified to perform the work. Conversely, professional engineers may perform incidental work in the field of architecture under the same conditions.

106.5 Construction by a School District: A district may undertake small construction or renovation work using their own maintenance forces, or with vocational student or sub-contractor assistance. Note that under certain conditions licensure from the S.C. Contractors Licensing Board is required.

106.5.1 Drawings or a scope of work must be submitted and prior approval first obtained from the OSF.

106.5.2 Complete architectural and/or engineering services must be required unless otherwise waived by the OSF.

106.5.3 Third party inspections will be required for all work.

106.5.4 A district may engage in a contracting project up to $350,000 for general contracting and $125,000 for mechanical, plumbing, or electrical contracting, and $5,000 for asphalt paving contracting. The district must employ a certified party qualified in the classification of work that is to be performed (South Carolina Code Ann. § 40-11-230 and South Carolina Code Ann. § 40-11-360 {A}{8}) and submit the name of the party to the OSF for approval prior the start of construction. The certified party may be an employee of the District or contracted for the work.

106.5.5 The "cost of the work" must be determined by the cost of all materials, labor, subcontracts, and any other direct expenses. This estimated cost may be determined by a detailed estimate prepared by the district or may be estimated by the OSF based on current square foot cost of school construction, adjusted for any anticipated savings.

106.6 When Professional Services Are Not Required: The services of professional and specialists mentioned in items preceding are not normally required in the following situations (exceptions are noted). It is incumbent upon the district to ascertain that the work complies with applicable codes when professional services are not used.

106.6.1 For very small projects or projects of sufficiently limited scope, if the OSF agrees that the scope of the project does not justify the use of such professionals or specialists mentioned above. In such cases, the district must submit prior written request for waiver; use Form F1 "Request for Waiver from Use of Professional Services" in Division 9 of this *Guide*.

106.6.2 For minor renovation or alteration work where building codes, laws, or regulations are not involved, or for work that is cosmetic in nature (painting, etc.), or for work which is of a routine maintenance nature.

106.6.3 Reroofing projects when no weight is added, the drainage does not change and the roofing membrane remains essentially the same as the existing roof.

106.6.4 Professional services may not be required for demolition projects. However, surveys for hazardous materials are required before demolition and those surveys or mitigation may require professional services. Please contact the OSF if clarification is required.

106.6.5 For locker installations, the vendor must submit drawings and specifications to the OSF for approval prior to installation.

106.6.6 For auditorium seating or folding gymnasium seating installations, the successful bidder must submit drawings and specifications to the OSF for prior approval, along with certification by the manufacturer that all applicable code requirements have been met.

106.6.7 For prefabricated walks and canopies, or prefabricated spectator bleachers for outdoor athletic facilities, the successful bidder must submit drawings and specifications to the OSF for prior approval. Furthermore, a structural engineer registered to practice in South Carolina must be retained by the successful bidder to approve and stamp the drawings and specifications and to certify by letter that all applicable code requirements have been met. The engineer may be in the employ of the manufacturer of the units if he meets the above registration requirement.

SECTION 107 INSPECTIONS

107.1 Required inspections must be performed by inspectors approved by the OSF.

107.2 The scope of both Chapter 1 and Chapter 17 inspections must be determined by the design professional team in conjunction with the district and the OSF.

107.3 The Inspector is responsible for inspecting work for compliance with the code as represented on the design documents.

107.4 The Inspector must advise the owner, design professional and the contractor of all code related deficiencies.

107.5 The Inspector must submit periodic deficiency logs on a schedule specified by the OSF.

107.6 The OSF, as the Authority Having Jurisdiction, must make the final determination of any code interpretation.

SECTION 108 BASIC CODES AND STANDARDS

108.1 In accordance with SC Code Ann §§ 1-34-10 thru 70, the OSF has adopted the following codes with all SC modifications as adopted by the SC Building Codes Council:

108.1.1 International Building Code (IBC), 2006 Edition,

108.1.2 International Existing Building Code (IEBC), 2006 Edition,

108.1.3 International Fire Code (IFC), 2006 Edition,

108.1.4 International Energy Conservation Code (IECC), 2009 Edition,

108.1.5 International Fuel Gas Code (IFGC), 2006 Edition,

108.1.6 International Mechanical Code (IMC), 2006 Edition,

108.1.7 International Plumbing Code (IPC), 2006 Edition, with the following insertions:
107.1.7.1 Section 305.6.1, insert "24" and insert "24"
107.1.7.2 Section 904.1, insert "8"

108.1.8 International Private Sewage Disposal Code (IPSDC), 2006 Edition,

108.1.9 International Property Maintenance Code (IPMC), 2006 Edition,

108.1.10 International Residential Code for One and Two Family Dwellings (IRC), 2006 Edition, with the following insertions:
107.1.10.1 P2603.6.1, insert "12" and insert "24"

108.1.11 International Wildland – Urban Interface Code (IUWIC), 2006 Edition, Note: The IUWIC does not supersede existing statutory requirements.

108.1.12 National Electrical Code (NEC) [NFPA-70], 2008 Edition

108.1.13 National Electrical Safety Code, ANSI-C2-2007 Edition

108.1.14 ASCE 7—2005

108.1.15 ASHRAE 62, as referenced by ICC Codes

108.1.16 ASHRAE 90.1, as referenced by ICC Codes

108.1.17 Latest edition of the American National Standards Institute, Inc. (ANSI) document A117.1, Accessible and Useable Buildings and Facilities. Note that this standard is the standard adopted by the South Carolina Accessibility Act but this requirement does not relieve the District or the design professional from the Federal Statutory requirements that design and construction comply with the Americans With Disabilities Act Accessibility Guidelines for Buildings and Facilities. See http://www.access-board.gov/ada/

108.1.18 State Fire Marshal rules, regulations, and policies. See http://www.scfiremarshal.llronline.com/EngServices/index.asp?file=AdoptedStandards.htm

108.1.19 South Carolina Elevator, Code, & Regulations.1: See http://www.llronline.com/elevators/index.asp?file=laws.htm

108.1.20 The SC Elevator code references the American Society of Mechanical Engineers Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, and supplements thereto, ASME A17.1.

108.1.21 International Code Council Performance Code (ICCPC), 2006 Edition, upon Director of OSF written approval.

108.1.22 Governors Executive Order No. 82-19 (April 1982) – State of SC Building Standards in Floodplain Areas and compliance with the criteria in Title 44, Code of Federal Regulations, Parts 60.3 and 60.5. See http://www.gpoaccess.gov/cfr/index.html . Copies of these Parts are available from the State Coordinator's Office for the National Flood Insurance Program (NFIP).

108.1.23 The South Carolina Modular Buildings Construction Act S.C. Code § 23-43-10 et. Seq.

108.1.24 See Section 113 for School Bus Safety requirements.

108.1.25 See Section 113 for reference to OSHA standards

108.1.26 See Section 113 for reference to DOT standards

108.2 The adopted codes and standards in effect at the time of the initial submittal (design development or schematic), must establish code requirements for the remainder of the project.

108.3 Alternative Means and Methods: The OSF has the authority to accept alternative methods of compliance within the intent of these regulations, after finding that the materials and method of work offered is for the purpose intended, at least the equivalent of that prescribed in these regulations in quality, strength, effectiveness, fire resistance, durability, and safety. The OSF must require sufficient evidence or proof be submitted to substantiate any claim that may be made regarding use of alternative. All requests for acceptance must be supported by and submitted by a South Carolina registered design professional.

108.4 Resolutions of Conflicts

108.4.1 Where state statutes are at variance with the adopted codes or standards or other provisions of this document and this regulation is silent, the most stringent requirements must govern. The Design Professional must notify the OSF of any such conflicts as soon as they become known.

108.4.2 Where this document is specific and is at variance with a code or standard referenced herein, this document must govern whether more or less stringent.

SECTION 109 PERMITS

109.1 The design professionals must be responsible for obtaining all design-related permits and approvals. Status of permits and approvals must be submitted to the OSF along with final review documents.

109.2 The school district must comply with local zoning ordinances.

109.3 The contractor is not required to purchase a building permit from the local building official for general construction, as district projects are exempt from this requirement by S.C. Code Ann. § 6-9-110 (1990).

109.4 Permits and approvals required by South Carolina state laws and regulations include, but are not limited to, those listed in the schedule below. Permits and approvals required by Federal laws and regulations have not been included in this schedule; however, the school district must comply with requirements of federal agencies (e.g., EPA, Corps of Engineers), whenever required by law.

DESIGN AND CONSTRUCTION RELATED PERMITS AND APPROVALS

The following list is not all-inclusive of every, permit and standards applicable to each project and not all projects will require all of the permits listed below. District and A/E's must determine applicable permits for each project..

Type of Development	SC Law or Reg.	Where to Obtain Permit/Approval	Status
Air pollutant discharge	48-1-100, R61-62.1	SCDHEC - Air Quality Control	
Asbestos abatement	R61-86.1	SCDHEC - Air Quality Control	
Building construction, Zoning	6-7-830, 6-9-110	Local Authority	
Community residential care facilities	R61-84	SCDHEC - Health Facilities Construction	
Construction in critical coastal areas	48-39-10, 130, 190	SCDHEC - Ocean & Coastal Res. Mgmt.	
Construction in navigable waters	49-1-16	SCDHEC - Water Pollution Control	
Dams and reservoirs	49-11-200, R72-1, 2, 3	SCDHEC - Water Pollution Control	
Demolition of Real Property	R61-86.1	SCDHEC - Air Quality Control	
Design Review Board (BARs, SC Dept Archives & History, etc.)	Various local	Various local	
Early Childhood Development	R114-500	SCDSS – Child Care Licensing	
Elevators	41-16-10, R71-5000-5900	SCLLR	
Fire Department (Local)	Various local & State	Servicing Fire Department	
Fire, Building Automatic Sprinkler System and underground supply	40-10-260, R71-8300.4	State Fire Marshal	
Floodplains, construction in	Exec. Order 82-19	SCDNR	
Food service including concession and temporary	R61-25	SCDHEC – State and Local Office	
Hazardous waste management, Storage and disposal	44-56-20,60, R. 61-79	SCDHEC, Solid and Hazardous Waste	
Historical building rehabilitation	R12-125, 126	Archives and History, Local Authority	
Road encroachment, local road	57-7-60	Local City or County Authority	

DESIGN AND CONSTRUCTION RELATED PERMITS AND APPROVALS

The following list is not all-inclusive of every, permit and standards applicable to each project and not all projects will require all of the permits listed below. District and A/E's must determine applicable permits for each project..

Type of Development	SC Law or Reg.	Where to Obtain Permit/Approval	Status
Road encroachment, state road	57-5-1080	SCDOT Traffic Engineering Office	
Sanitary sewer; grease trap	Various local	Local City or County Wastewater Authority	
Sanitary sewer; treatment & disposal	R61-56, 57	SCDHEC – Domestic Wastewater	
Septic tank system	R. 61-56	SCDHEC, Wastewater Management, Division of Environmental Health	
Storm water discharge, erosion and sediment control	R61-9; R72-100-108	SCDHEC – Water Pollution Control; State Engineer; Local Authority	
Swimming areas, natural public	R61-50	SCDHEC – Water Supply Construction	
Swimming pools, public	R61-51	SCDHEC – Water Supply Construction	
Underground storage tanks	R61-92	SCDHEC – Groundwater Protection	
Waste discharge (sewage, industrial waste, etc.)	48-1-100, 110, R61-9	SCDHEC – Water Pollution Control	
Water supply, potable	44-55-40, R61-57, 58	SCDHEC – Water Supply Construction	
Water supply, fire protection system	40-10-260, R71-8300.4	State Fire Marshal	
Wells, Underground injection	R61-71, 87	SCDHEC – Groundwater Protection	
Vocational facilities	Various	SCLLR Board of Cosmetology, SCLLR Board of Barber Examiners SCDHEC Food Service	
Zoning(Municipal, County or District)	Various	Local	

109.5 The "State of South Carolina Building Standards in Flood Plain Areas" requires compliance with the criteria set forth in Sections 60.3 and 60.5 of Title 44, Code of Federal Regulations available from the State Coordinator's NFIP. See also http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=4c3b8d3a9b324b28c83f066afc0f2425&tpl=/ecfrbrowse/Title44/44cfr60_main_02.tpl. Flood hazard areas are those identified by FEMA on FIRMs or FHBM that are subject to inundation by a 100-year flood.

109.5.1 All plans for new construction, substantial improvement and other development in a flood hazard area (floodplain) must be submitted to the responsible local authority to obtain a permit to develop in a flood hazard area.

109.5.2 A permit must be obtained and the OSF must be provided with a permit copy prior to advertising a project for bids.

SECTION 110 GENERAL BUILDING, MATERIAL AND SYSTEM REQUIREMENTS

110.1 All components used in an assembly that is required to be rated must be tested and certified to meet rating required as outlined in the IBC. Testing and certification must be performed by an accepted testing lab (UL, Warnock Hersey, etc.). If a component that has not been tested is to be used, then the fire resistance of said component must be established by alternative methods of determining fire resistance as allowed in Chapter 1 and 7 of the IBC and verified by the design professional. Documentation must be present on site stating method for determining fire resistance and data showing compliance with required fire resistance rating. In an instance where tested concrete block or any other component of a rated assembly is required in a tested design assembly, components meeting the requirements of the current building code for the required fire resistance rating must be accepted as equivalent to the components tested by a testing lab.

110.2 Due to the numerous problems associated with the use of fire retardant treated wood in construction due to exposure to moisture and deterioration of fasteners or attached materials, the use of fire retardant treated wood will not be allowed.

110.3 Buildings that have been out of use for more than one year must be brought up to code as a new building before they are re-occupied.

110.4 When the use of a building changes the occupancy classification as defined in the building code, the building must be brought up to meet the code requirements of the new classification.

110.5 Alterations, repairs, additions, and rehabilitation to an existing building or structure must comply with the State Fire Marshal's Rules and Regulations and the IEBC as applicable. The term "building value" referred to in the State Fire Marshal's Rules and Regulations must be the insured value of the structure.

110.4 Construction Coordination Plan for Work Performed in and adjacent to an Occupied Building The design professional in conjunction with school district staff and, if applicable, the construction/program manager must develop a written and/or graphic plan to maintain separation and egress requirements of students, staff, and visitors while construction activities are in progress. The plan must address exit access, exit width, travel distance, building separation, site traffic circulation, etc.; as code would require for the occupied portion of the project for each phase of construction. This plan must be submitted no later than the design development phase. This approved plan must be made part of the construction documents.

SECTION 111 BOARD OF APPEALS

111.1 In order to hear and decide appeals of orders, decisions or determinations made by the OSF relative to the application and interpretation of the codes referenced in this *Guide*, there must be established a board of appeals whose members must be appointed by and who must serve at the pleasure of the SC State Superintendent of Education. The OSF must establish procedures for conducting the board's business.

111.2 An application for appeal must be based on a claim that the true intent of the referenced codes has been incorrectly interpreted, the provisions of the referenced codes do not fully apply or an equally good or better form of construction is proposed. The board does not have the authority to waive requirements of the referenced codes or the *Guide*.

111.3 The board of appeals must consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the SC Department of Education or a school district.

SECTION 112 PROCUREMENT

112.1 Procurement of professional design services, construction and goods and services is the responsibility of each school district in accordance with their established procurement code. The OSF recognizes all procurement methods authorized and defined in South Carolina Code Ann. §11-35-2910 and §11-35-3005. If the district would propose a plan submittal and approval process that differs from the procedures in the *Guide*, the district must coordinate new procedures prior to and bidding.

112.2 **Pre-qualification:** Project delivery methodology may be subject to pre-qualification as prescribed by the district's procurement code.

112.3 The requirements of this *Guide*, while written primarily for the single contract method of design-bid-build construction must also apply to each contract of the multi-prime or fast track method except where otherwise waived by the OSF.

112.4 The scope and schedule for a guaranteed energy savings contract must be coordinated with the OSF prior to signing of a contract. Heating, ventilating, or air conditioning system modifications or replacements, replacement or modification of lighting and/or electrical systems, energy recovery systems, and/or measures that are affected by any applicable codes, must be submitted as complete drawings and specifications with a professional seal of an Design Professional licensed to practice in South Carolina to the OSF for approval prior to installation of those measures. Drawings are not required if the scope of work is defined, in writing, to the approval of the OSF. Third party inspections are required for all applicable work. The OSF notification, inspection and acceptance of the work will be as outlined in the *Guide*.

SECTION 113 OTHER RELATED STANDARDS

113.1 Building automatic sprinkler systems are to be submitted to the State Fire Marshal's Office for review and approval in accordance with the State Fire Marshal's Rules and Regulations.

113.2 Any project which requires asbestos or other hazardous material mitigation is subject to AHERA and SCDHEC regulation

113.3 Schools must be in compliance with OSHA Standards. For further information, contact SCLLR OSHA.

113.4 In reference to school food services and facilities, SCDHEC has set forth its requirements in this regard in Regulation 61-25 entitled "Retail Food Establishments." The owner must contact the SCDHEC Division of Food Protection to obtain this regulation and to secure plan approval.

113.5 Standards relating to roadway access have been developed by SCDOT in accordance with Sections 57-3-110, 57-5-1080 and 57-5-1090 of the Code of Laws of South Carolina (1976 as amended through the 2006 Session of the General Assembly.) They can be found in the document titled *"2008 Access and Roadside Management Standards,"* available on the SCDOT website.

113.6 Standards and Guidelines concerning bus safety on school sites and planning bus parking lots have been developed by the Transportation Office of the SC Department of Education. They can be found in the document, *Planning for Bus Safety on School Sites and School Bus Parking Lots.* This document is available on the OSF web site.

SECTION 114 WAIVERS

114.1 Section 43-261, Code of Regulations provides that the State Board of Education may waive any regulation, which would impede the implementation of an approved District Strategic Plan or School Renewal Plan.

114.1.1 When a district's Strategic Plan is at variance with the requirements of the *Guide*, the district board or its designee must submit to the State Board of Education through the Office of School Facilities a detailed description of the programmatic variance to include the requirement(s) at issue and the physical facility requirements necessary, as well as, the educational requirement necessary to implement the district's Strategic Plan.

114.1.2 The State Board of Education cannot waive requirements in referenced codes listed in Section 108.

114.2 South Carolina Code Ann. §59-23-230 (Supp. 2009) authorizes the State Superintendent of Education to waive regulations relating to building square footage requirements for construction of a new public school.

SECTION 115 OTHER DESIGN RESOURCES

115.1 The OSF believes in enhancing safety and discouraging violence and crime by careful consideration in the design of sites and buildings. By applying principles of CPTED (Crime Prevention Through Environmental Design) and other design features to reduce or eliminate conflicts or hazardous conditions, a safe, functional and orderly environment can be established. The OSF endorses the concept that a safer environment can create a psychological advantage for positive behavior and for learning.

115.2 The OSF encourages school districts to follow the principles of LEED, Green Globes or other high performance standard certification in school construction. Design professionals can assist in determining the most advantageous principles and/or certification level.

DIVISION 2

DESIGN AND CONSTRUCTION PHASE REQUIREMENTS

SECTION 201 INDEX OF SECTIONS

Section Number and Title		Page	Section Number and Title		Page
202	**Schematic Plan Submittal**	**2-1**	**205**	**Bid Phase Submittal**	**2-3**
203	**Design Development Submittal**	**2-1**	**206**	**Construction Phase**	**2-3**
204	**Construction Document Submittal**	**2-2**			

SECTION 202 SCHEMATIC PLAN SUBMITTAL

202.1 One set of schematic plans should be submitted for new facilities, major additions and major renovations. Schematic plan review is optional but is encouraged for large and complex projects.

202.2 Site plan to include the following to the extent information is available:

1. North arrow;
2. Building outline(s);
3. Property lines;
4. Adjacent roadways;
5. Easements;
6. Encroachments;
7. Setbacks;
8. Parking areas;
9. Playing fields;
10. Existing Contours;
11. Adjacent structures and distance;
12. Other items defining the site such as hazards, wetlands, wooded areas, etc.

202.3 Floorplans to include the following to the extent information is available:

1. Individual spaces with names indicating intended use;
2. Egress paths with anticipated exit capacities and travel distances;
3. Location of fire walls, occupancy separations, exit enclosures and horizontal exits.

202.4 Other information to be submitted:

1. Schematic Document Transmittal Form;
2. Form F3 with available information;
3. Form F6 with available information;
4. Any other information in narrative form describing program elements or design intent that will impact design solutions.

SECTION 203 DESIGN DEVELOPMENT SUBMITTAL

203.1 One set of design development plans must be submitted for all projects.

203.2 Site plan at an appropriate scale to include the following:

1. North arrow;
2. Building(s);
3. Actual property lines and any assumed for code analysis purposes;
4. Adjacent roadways with full width right of way information;
5. Easements;
6. Encroachments;
7. Setbacks;
8. Parking areas;
9. Playing fields;
10. Traffic routing for pedestrians, bicycles, vehicles and busses;
11. Existing and proposed contours;
12. Adjacent structures and distance;
13. Utilities above and below ground including within road right of way;
14. Fire apparatus access;
15. Other items defining the site such as hazards, wetlands, wooded areas, etc.

203.3 Drawings at an appropriate scale to include the following:

1. Form F3 and list of applicable permits;
2. Overall plan at a smaller scale if scope of work cannot be shown entirely on one plan;
3. If the project is a renovation or addition to an existing building, provide information for the existing building that would affect code considerations such as allowable building area, egress, plumbing fixture counts, etc.
4. Floorplans indicating names for individual spaces and intended use, grade classification and occupancy load;
5. Developed life safety plans with walls, floor and roof rating delineated, egress routes with exit capacities, widths and travel distances noted and areas of refuge identified;
6. Location of fire walls, occupancy separations, exit enclosures, horizontal exits, smoke enclosures and rated shaft locations;
7. Elevations and building sections sufficient to describe the building;
8. Location of equipment and furnishings requiring utility connections or affecting egress.

203.4 Other information to be submitted:

1. Design Development Document Transmittal Form;
2. Form F6 with available information;
3. Response to previous comments if reviewed;
4. Any other information in narrative or diagrammatic form describing program elements or design intent.

SECTION 204 CONSTRUCTION DOCUMENT SUBMITTAL

204.1 One set of District approved construction document plans sealed in accordance with state statutes and regulations must be submitted for all projects. Incomplete plans or specifications will not be reviewed until all information has been received.

204.2 Construction document submittal must include:

1. Complete plans including all alternates;
2. Complete specifications including front end and all technical specifications;
3. ASHRAE 90.1 Envelope, HVAC and Lighting Compliance Sheets or Energy Model;
4. Lighting Calculations for each space;
5. Previously submitted information must be updated as required;
6. Status of all permits;
7. Written responses to previous review comments.

204.3 Projects cannot be advertised for bid until plans and specifications have been approved by the OSF.

204.4 If advertising is delayed longer than six months after initial approval of construction documents by the OSF, the design professional must request in writing a new permission to advertise. The design professional must certify that no changes have been made to the original contract documents or must resubmit revised contract documents for review and approval.

SECTION 205 BID PHASE

205.1 One set of bid documents sealed in accordance with state statutes and regulations must be submitted to the OSF. Plans may be paper or in electronic format.

205.2 The design professional must submit a copy of all addenda to the OSF.

205.3 The design professional must submit a status of all outstanding permits and approvals to the OSF. Any changes to documents previously reviewed and approved for permitting purposes must be resubmitted to the approving authority and the status of the resubmittal noted to the OSF.

SECTION 206 CONSTRUCTION PHASE

206.1 Any change order or change directive not limited to time must be submitted to the OSF by the design professional with a code impact statement prior to execution of the change order or change directive. Any changes to documents previously reviewed and approved for permitting purposes must be resubmitted to the approving authority and the status of the resubmittal noted to the OSF. Change orders and change directives having a code impact or a change in permit status require the OSF approval before execution.

206.2 Any reply to a contractor's request for information that results in a corrective action, clarification or bulletin drawing not resulting in a change order but having a code impact must be submitted to the OSF prior to giving the contractor notice to proceed. Any changes to documents previously reviewed and approved for permitting purposes must be resubmitted to the approving authority and the status of the resubmittal noted to the OSF. Corrective action, clarification or bulletin drawings having a code impact or a change in permit status require the OSF approval prior to giving the contractor notice to proceed.

206.3 Inspections During Construction: The design professional must request an inspection by OSF prior to closing rated construction and other concealed areas for inspection of fire and smoke protection measures. Reference material to be available at the site must include:

1. Red lined drawings;
2. Change directives with supporting documentation;
3. Change Orders with supporting documentation;
4. RFI's with supporting documentation;
5. Bulletin drawings;
6. Reviewed submittals and shop drawings;
7. Current deficiency log with Chapter 1 and 17 inspection reports.

206.3.1 The design professional must verify all work is complete and ready for inspection prior to notifying the OSF.

206.3.2 The design professional must provide at least one weeks' prior notice for the inspection.

206.3.3 Phased inspections for large building can be scheduled. All work must be completed in each section before an inspection is made.

206.3.4 The design professional and contractor are required to attend the inspection. The design professional must invite representatives for the district, the contract inspector, the State Fire Marshal's office and the local fire department to attend the inspection.

206.4 Substantial Completion: The design professional must request an inspection by OSF when the contractor has reached substantial completion. Reference material to be available at the site must include:

1. Reference material to be available at the site must include:
2. Red lined drawings;
3. Change directives with supporting documentation;
4. Change Orders with supporting documentation;
5. RFI's with supporting documentation;
6. Bulletin drawings;
7. Reviewed submittals and shop drawings;
8. Current deficiency log with Chapter 1 and 17 inspection reports.

206.4.1 The design professional must verify the work is substantially complete and ready for inspection prior to notifying the OSF.

206.4.2 The following systems must be complete and all certification tests are complete prior to notifying the OSF.

1. Elevators;
2. Potable water;
3. Sanitary sewer;
4. Septic tank and drainfield system;
5. Fire Alarm;
6. Sprinkler Systems, Above Ground
7. Sprinkler Systems, Below Ground;
8. Other fire suppression systems

206.4.3 Inspections by specialty manufacturers for folding bleachers, communication systems, lightning protection systems, and other similar systems should be made before inspection is requested of the OSF and in all cases must be made before occupancy.

206.4.4 Inspections by SCDHEC for food service operations and SCDSS for early childhood areas should be made before inspection is requested of the OSF and in all cases must be made before occupancy.

206.4.5 The design professional should provide at least two weeks' prior notice for the inspection. The design professional must submit a completed and certified Form F4 at least 24 hours prior to the inspection.

206.4.6 Phased inspections for large building can be scheduled. All work must be completed in each section before an inspection is made. Inspection of whole building systems such as the fire alarm system must be made after the entire system is complete and tested and ready for inspection.

206.4.7 The design professional, contractor and a representative of the State Fire Marshal's office are required to attend the inspection. Representative(s) for the district, the contract inspector and the local fire department must be invited to attend the inspection.

206.4.8 The OSF will provide written record of the inspection and any deficiencies noted will be provided to the design professional. Significant deficiencies may require reinspection for approval.

206.4.9 If multiple occupancy inspections are required due to incomplete work or excessive deficiencies, the OSF reserves the right to charge the design professional, the construction/program manager and/or the contractor for the cost of additional services, including time and mileage costs.

206.5 Certificate of Occupancy: The OSF must issue a written Certificate of Occupancy before occupancy of a building is permitted. Before the Certificate can be issued, the following conditions must be met.

206.5.1 The design professional has verified the work is substantially complete.

206.5.2 The OSF has inspected the work and concurs with the design professional that the work substantially complete and all life safety systems are operating as required by the code. Additionally, all areas of the building and site are free of any apparent life safety hazard and egress is not compromised.

206.5.3 The design professional, district and the OSF have agreed to a date for project closeout.

206.6 Project Closeout: All outstanding documentation must be submitted to the OSF at project closeout.

206.6.1 All required permits and approvals have been received and copies have been transmitted to the OSF.

206.6.2 The design professional has submitted the completed Form F5.

206.6.3 The design professional has submitted certification that any remaining minor deficiencies not requiring the OSF reinspection are complete.

DIVISION 3

SITE ACQUISITION, DEVELOPMENT AND DISPOSAL

SECTION 301 INDEX OF SECTIONS

Section Number and Title		Page	Section Number and Title		Page
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303	**School Sites**	**3-2**	**305**	**Land Disposal**	**3-4**

SECTION 302 EVALUATION AND APPROVAL OF SITE ACQUISITION OR LEASE

302.1 All real property subject to acquisition by a district, whether unimproved land or land with existing improvements, for purchase or for lease, must first be approved by the OSF. All property must be acquired as per state statute.

302.2 Site inspections must be made of all property prior to acquisition. The design professional, if engaged by the District, should be present at the site inspection along with a representative of the District, a representative of SCDOT Traffic Engineering Division and all other interested parties.

302.3 Reference Form 2A for information to be reviewed during the site inspection. Provide the following information to the extent information is available:

1. Boundary map or plat indicating wetlands or other special areas of interest;
2. Aerial map showing roads adjacent to the proposed property;
3. Buildings plans if a structure is existing;

302.4 A written copy of the Form F2A along with the written report with recommendations from SCDOT will be returned to the District.

302.5 On a site where a septic tank system is planned, the District must receive preliminary approval from SCDHEC Division of Onsite Wastewater Management before site acquisition can be approved by the OSF.

302.6 If, after consideration of the recommendations by the OSF, SCDOT, and any other resources the District engages in order to exercise due diligence when evaluating the property, the District elects to proceed with the acquisition or lease, the District must submit the Form F2 with the following supporting documentation:

1. Boundary plat prepared by a registered land surveyor indicating acreage, bounds, adjoining roads, wetlands and flood plain information and other pertinent information;
2. Topographic information, if available;
3. Phase 1 Environmental Report;
4. Phase 2 Environmental Report, if required;
5. Geotechnical Report, if available;
6. SCDOT Site Traffic Report;
7. Form F2A OSF Site Evaluation.

SECTION 303 SCHOOL SITES

303.1 The OSF encourages Districts to utilize the "Best Practice for Site Selection and Planning" available from the OSF when considering a site for acquisition or lease. Recommendations by CEFPI may also provide valuable information for the District to consider when evaluating property.

303.2 The school district is required by South Carolina Code Ann.§6-29-540 to comply with local zoning ordinances and to consult with the local planning commission as to the compatibility of the proposed school site with the comprehensive plan of the community. In the event the planning commission finds the proposal to be in conflict with the comprehensive plan, the commission must transmit its findings and the particulars of the nonconformity to the District. If the District determines to go forward with the project which conflicts with the comprehensive plan, the School Board must publicly state its intention to proceed and the reasons for the action. A copy of this finding must be sent to the local governing body, the local planning commission, and published as a public notice in a newspaper of general circulation in the community at least thirty days prior to awarding a contract or beginning construction.

303.3 Parking is determined by local zoning ordinance. In the absence of a local zoning ordinance, districts may use Table 801.2.1 of the IZC or other code as approved by the OSF.

303.4 Roadway improvements requisite to access requirements and adequate to address any potential safety hazards are the responsibility of the school district. Districts must consider both the cost and impact to schedule when considering a site. The SCDOT must be consulted for roadway improvements whenever stacking loops or access to a school is modified, or whenever a new school is planned, or an addition that increases the number of students is planned. Access to a school site must be as defined by the SCDOT Traffic Engineering Division, as part of the application process for an encroachment permit. Chapter 4: "School Access Design" in the 2008 Access and Roadside Management Standards developed by the SCDOT's Traffic Engineering Division provides additional criteria.

303.4.1 County or State road frontage must be ample enough to allow for separate car and bus entrances and exits, unless otherwise agreed to in conjunction with SCDOT and/or the appropriate city/county authority.

303.4.2 On-site school bus traffic must be physically separated from visitor, parent, and student traffic at all schools unless approved by the OSF.

303.4.3 School automobile and bus loops must operate in a one-way counterclockwise direction or in a manner that assures that the loading/unloading of students occurs from the right hand side of the vehicle adjacent to the building to prevent pedestrians from crossing traffic lanes.

303.4.4 A site plan showing traffic and parking improvements must be submitted to and approved by SCDOT Traffic Engineering Division prior to bidding the project. The current Form F6 School Transportation Information Form must be shown on the site plan. This approval is required for any improvement affecting traffic or parking on or adjacent to the site, even if the work does not require an encroachment permit. Technical assistance necessary to this objective is available from the SCDOT, Traffic Engineering Division.

303.5 Pedestrians and bicyclists must have a designated safe path between the adjacent roads, school drives, parking areas and the school building.

SECTION 304 EXISTING SITE ADDITIONS OR CHANGES

304.1 When additions or changes are made to an existing site, the additions or changes must comply with the requirements of this Division.

SECTION 305 LAND DISPOSAL

305.1 In accordance with §59-19-190, the reassignment or disposal of land purchased with any state funds after 1952 must be subject to the prior written approval of the State Board of Education. Request for disposition of such parcels must be made through the OSF for submission to the State Board of Education.

305.2 Parcel(s) may contain internal roads identified as being on the State Highway System regardless of purchase date. These are roads that are owned and maintained by the SCDOT and will require the SCDOT to remove the road(s) from the system prior to the disposal of the property. Providing a boundary survey (if available) of the parcel with the disposition request to the OSF will aid the SCDOT in determining if any road(s) are on the State Highway System.

DIVISION 4

DESIGN CRITERIA

SECTION 401 INDEX OF SECTIONS

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402	**General Requirements**	**4-1**
403	**Special Requirements for Instructional Spaces**	**4-1**
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404	**Other Special Requirements**	**4-2**
404.1	Lockers	**4-2**
404.2	Stages and Platforms	**4-2**
404.4	Drinking Fountains/Water Coolers	**4-3**

SECTION 402 GENERAL REQUIREMENTS

402.1 The OSF encourages Districts to utilize the "Best Practices for Instructional Space" available from the OSF when planning instructional and support spaces. Recommendations by the CEFPI may also provide valuable information for the District to consider when planning.

402.2 Design professionals are reminded that design criteria in Title II of the Americans with Disabilities Act (ADA) and the ADA Accessibility Guidelines (ADAAG) for buildings and facilities may be more stringent.

402.3 Maximum occupancy for all assembly occupancies and any other spaces designated by the OSF or the State Fire Marshal must comply with the IBC 1004.3

SECTION 403 SPECIAL REQUIREMENTS FOR INSTRUCTIONAL SPACES

403.1 Interior Classrooms

403.1.1 An interior classroom or other instructional space that does not have access to daylighting must be limited to spaces such as art or music where students will occupy for one or two class periods unless approved by the OSF.

403.1.2 Interior classrooms must be mechanically heated and cooled and provided with emergency lighting.

403.2 Early Childhood and Kindergarten

403.2.1 The electrical outlets must be of the tamper resistant type or be provided with blank plastic safety plugs.

403.2.2 Classrooms for 4K and younger monitored under the Child Development Education Pilot Program (CDEPP) must meet the requirement of SCDSS in addition to the requirements of this *Guide*.

403.2.3 Head Start classrooms for 4K and younger must meet the federal program requirements in addition to the requirements of this *Guide*.

SECTION 404 OTHER SPECIAL REQUIREMENTS

404.1 Lockers

404.1.1 Lockers located in corridors must not reduce the required minimum clear width of the exit including locker doors that swing into the corridors. Both locker sets and door widths must be outside the minimum required corridor width when lockers are located on opposite sides of the corridor.

404.2 Stages and Platforms

404.2.1 Whenever a stage or platform is planned adjacent to or as a part of a cafeteria or gymnasium, the occupancy calculation must be based on the floor area in addition to any fixed seating (e.g. bleachers) for both the calculation of egress requirements and, in middle and high schools, the calculations of readily available plumbing fixture requirements.

404.3 Toilet Facilities

404.3.1 Individual toilets located in individual offices, workrooms or other areas with restricted access do not count toward the code required fixtures for the building.

404.3.2 Individual toilets located in instructional spaces may count toward the code required fixtures for the building if demonstrated that the fixtures are sufficient to serve the space and no public load is anticipated in the area.

404.3.2.1 Toilets must comply with IPC 403.2 for spaces serving students above the second grade.

404.3.2.2 At least 25% but not less than two toilet rooms for each type of space or grade served must comply with ANSI 117.1.

404.3.3 Individual toilets located in self-contained classrooms serving children with disabilities must comply with ANSI 117.1, IBC 1109.2.1.2 and IBC 1109.2.1.6.

404.3.4 Fixture counts for cafeterias, gymnasiums, auditorium and multipurpose spaces must be determined based on the intended use with the highest occupancy. Fixture counts for these areas that will not be used simultaneously may overlap with approval of the OSF.

404.3.5 Toilet facilities must be located near the area served, but in no case more than a 200 foot travel distance.

404.3.6 Toilet facilities and security measures must be located so that toilets are available whenever the space is occupied such as during afterschool programs and evening meetings.

404.3.7 Toilet facilities for outdoor activities must be provided. The facilities may be located in dedicated facilities such as a field house, in an adjacent building or with temporary facilities.

404.3.7.1 All required toilet facilities must be available for the duration of the activity.

404.3.7.2 At least 50% of the required fixtures and all required accessible fixtures must be located within a 200 foot travel distance.

404.3.7.3 The balance of the required fixtures must be located with no more than a 500 foot travel distance

404.3.7.4 If remote facilities are planned, directional signage to the additional facilities must be provided.

404.4 Drinking Fountains/Water Coolers

404.4.1 Water coolers or an alternate source of free water is required in all cafeterias serving free or reduced meals.

404.4.2 Gymnasium and auditorium lobbies must have a minimum of one fountain/cooler located in each area.

404.4.3 Bi-level water coolers must be counted as one fixture for fixture count purposes.

DIVISION 5

FIRE PROTECTION SYSTEMS

SECTION 501 INDEX OF SECTIONS

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502 General Requirements	**5-1**		

SECTION 502 GENERAL REQUIREMENTS

502.1 The Contractor, through the Engineer of Record, must provide the OSF with a copy of the underground fire sprinkler system drawings approved by the State Fire Marshal's office prior to the start of installation.

502.2 The Contractor, through the Engineer of Record, must provide the OSF with a copy of the above ground fire sprinkler system shop drawings approved by the State Fire Marshal's office prior to the start of installation.

502.3 All plans must be coordinated with and approved by the District prior to submittal. The District must approve the location of risers, valves, inspector's test discharge and other components of the system that affect the operation of the building.

DIVISION 6

PLUMBING

SECTION 601 INDEX OF SECTIONS

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602	**General Requirements**	**6-1**	**605**	**Fuel Gas Piping**	**6-1**
603	**Sewage Disposal**	**6-1**	**606**	**Fixtures**	**6-1**
604	**Interior Plumbing**	**6-1**			

SECTION 602 GENERAL REQUIREMENTS

602.1 Other regulatory authorities may require permits or have requirements in addition to the ICC Codes and the *Guide*. Refer to Section 109 Permits for additional information and guidance.

SECTION 603 SEWAGE DISPOSAL

603.1 All waste from kitchen areas except food grinder/garbage pulpers shall discharge through a grease trap.

603.2 Food grinders/garbage pulpers shall not be installed in facilities served by a septic system in accordance with SCDHEC regulations.

SECTION 604 INTERIOR PLUMBING

604.1 Hot water may be omitted from group toilets.

604.2 Rain water, and/or grey water systems for use within buildings requires prior approval by the OSF with demonstration of adequate protection to ensure the health of the building occupants to include, but not limited to pipe identification.

SECTION 605 FUEL GAS PIPING

605.1 An emergency shutoff device for flammable laboratory gasses shall be located in an accessible location within 5 feet of the exit closest to the instructor's table.

SECTION 606 FIXTURES

606.1 Mounting heights and configurations for fixtures shall comply with the applicable codes including ANSI A117.1. The requirements for Water Closets and Toilet Compartments for Children's Use shall apply to fixtures intended to serve children in first grade and younger. Urinals, if used in these rooms, shall be mounted with the top of the front rim at the same height as required for the water closet. Please refer to the section discussing toilet facilitates in the "Best Practices for Instructional Space" for additional recommendations and guidance

DIVISION 7

MECHANICAL

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702 General Requirements	**7-1**		

SECTION 702 GENERAL REQUIREMENTS

702.1 Duct other than runouts to diffusers and grills must be constructed of metal in accordance with SMACNA standards except in special limited applications as approved by the OSF. Duct must be cleanable and duct liner installation must be minimized.

DIVISION 8

ELECTRICAL

SECTION 801 INDEX OF SECTIONS

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802	**General Requirements**	**8-1**	**804**	**Fire Alarm System**	**8-1**
803	**Emergency Power**	**8-1**			

SECTION 802 GENERAL REQUIREMENTS

802.1 Conductors smaller than #2 AWG must be copper only.

802.2 Illumination levels must be based on IESNA for the use of the space as measured at 30” above finished floor.

802.2.1 Lighting calculations for each type of space must be included in the construction document submittal.

802.2.2 Minimum illumination levels for instructional spaces must be 50 footcandles average maintained horizontal at the task level. If an audiovisual scene is designed in the instructional space, the minimum illumination level is 15 footcandles maintained.

802.2.3 Lighting calculations must be based on a maximum total light loss maintenance factor (LLF) of 75%. Calculations must utilize reflectance values of the materials specified for the space.

802.2.4 Special lighting designs must have prior approval of the OSF.

SECTION 803 EMERGENCY POWER

803.1 The building telephone system and communications to the classrooms must be supported by emergency power for a minimum of 90 minutes.

803.2 Egress lighting for the following must be supported by emergency power:

803.2.1 Gymnasium dressing rooms

803.2.2 Administrative areas essential for emergency operations

803.2.3 Kitchens

803.2.4 Group toilets

803.2.5 Laboratory preparation rooms

803.2.6 Classrooms and instructional space

803.2.7 Spectator bleachers more than three rows high in athletic stadiums and at playing fields with field lighting.

SECTION 804 FIRE ALARM SYSTEM

804.1 Fire alarm cable must be installed in metallic conduit.

804.2 When a building is protected with a Remote Supervising Station fire Alarm System, the District must develop and implement a plan for the OSF's approval to comply with the following:

804.2.1 The District must identify a minimum of two persons on duty at the supervising station at all times. If the designated persons have other duties, those duties must be documented and approved by the OSF.

804.2.2 The District must notify the OSF of any changes to the approved plan.

804.2.3 A copy of the approved plan must be maintained with the annual fire alarm inspection and testing report.

804.3 An annunciator panel, where required by the selected system, must be installed at an attended location in the school administration area.

804.4 A drill function must be provided at the panel to enable the administrative personnel to initiate fire drills without operating an initiating device or activating the fire department notification apparatus.

804.5 All K4 and younger classrooms must have smoke detectors.

DIVISION 9

FORMS

F1 REQUEST FOR WAIVER FROM USE OF PROFESSIONAL SERVICES

F2 APPLICATION FOR APPROVAL OF PROPERTY ACQUISITION

F2A EVALUATION FOR APPROVAL OF PROPERTY ACQUISITION

F3 BUILDING CODE ANALYSIS FORM

F4 CERTIFICATION OF READINESS FOR OSF OCCUPANCY INSPECTION

F5 SQUARE FOOT COST INFORMATION

F6 SCHOOL TRANSPORTATION INFORMATION FORM

F7 REVIEW DOCUMENT TRANSMITTAL FORM