



**SOUTH CAROLINA
STATE DEPARTMENT
OF EDUCATION**



2013 SC School Facilities Planning and Construction Guide

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Director, Office of School Facilities



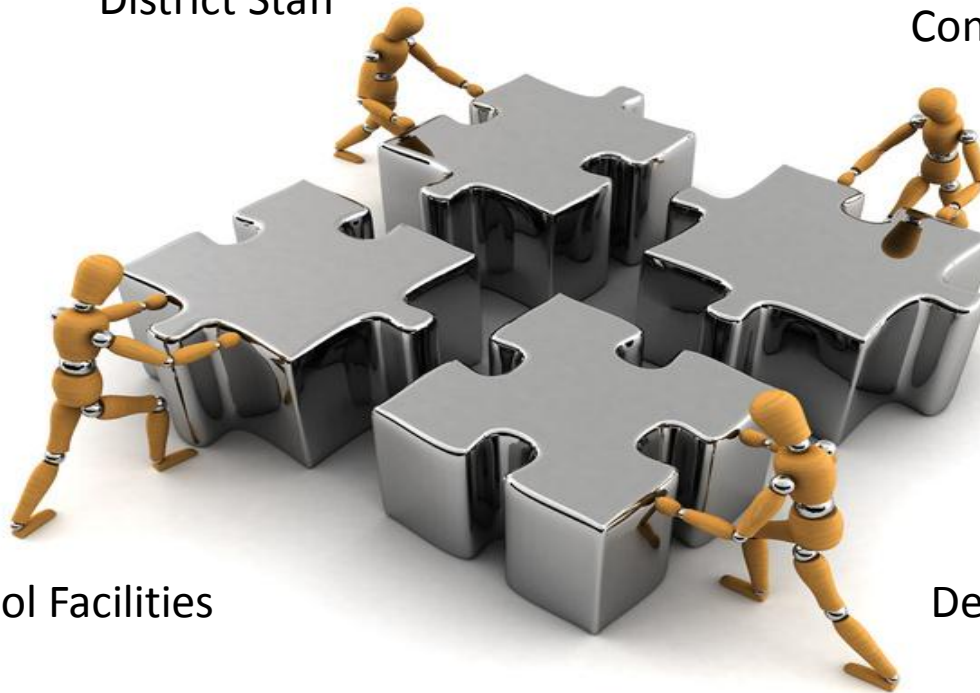
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Office of School Facilities

What is the Office of School Facilities?

District Staff

Contractors and Vendors



Office of School Facilities

Design Professionals



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Office of School Facilities

Designated by the Superintendent as:

Building Official

- Review and approve plans and specifications
- Review and approve construction



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Office of School Facilities

Administrative Authority

- Review and approve property acquisitions and disposals
- Coordinate annual review and revision of the two Guides



Office History

- Office established in March of 1924 along with first minimum statewide building standards for schools
- Regulations added as construction methods evolved
- Statute changes in 2003 established the South Carolina Public School Facilities Committee

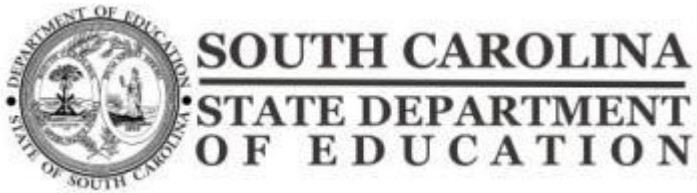


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South Carolina Public School Facilities Committee

Committee responsible for

- South Carolina School Facilities Planning and Construction Guide
- South Carolina Minimum Specifications Guide for Relocatable Classrooms



South Carolina Public School Facilities Committee

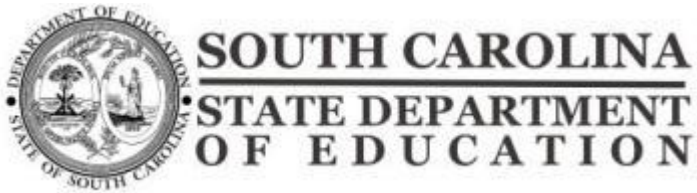
Committee Goal

Support the goals established by the State Superintendent of Education Mick Zais and the South Carolina State Board of Education to encourage a “new learning-centric, personalized system of education so that each individual – from early childhood through adolescence – is prepared for life, work and citizenship in the 21st century.”

“Goal for 2011”

Policy and Legislative Committee

SC State Board of Education



South Carolina Public School Facilities Committee

Committee objective

- Simplify and Streamline Requirements
- Provide Flexibility



Simplify and Streamline Requirements

Remove requirements restated from other codes, laws and regulations

- Avoid confusion because of language
- Avoid possible conflict with referenced requirement
- Avoid possible omission of a requirement that is not referenced



Provide Flexibility

Remove prescriptive programmatic requirements

- Allow the space to meet the educational program instead of fitting the program to meet the space
- Provide for more multi-use space
- Provide for more incidental learning opportunities

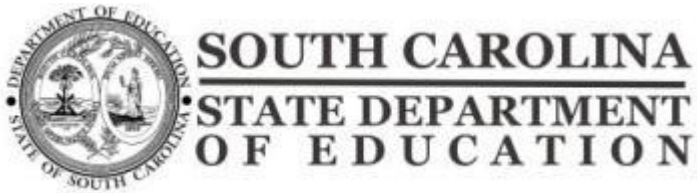


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Office of School Facilities

Best Practice Guidance

- Frequently asked questions
- Lessons learned
- Planning
 - Internal staff discussions
 - Discussions with parents and other community stakeholders
 - Discussions with design team



Best Practice Guidance

Current guidance

- Available on the OSF website
- Instructional Space
- Site Selection

Comments welcome



Best Practice Guidance

Possible topics for future guidance

- Energy Conservation
- Sustainability
- Operations and Maintenance
- Athletic Venue Management
- Security

Suggestions welcome



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SC School Facilities Planning and Construction Guide

Effective February 1, 2013

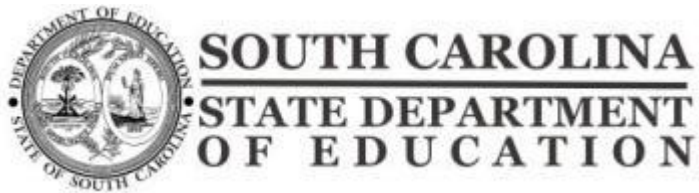
- Division 1 General Requirements
- Division 2 Design and Construction Phase Requirements
- Division 3 Site Acquisition, Development and Disposal
- Division 4 Design Criteria
- Division 5 Fire Protection Systems



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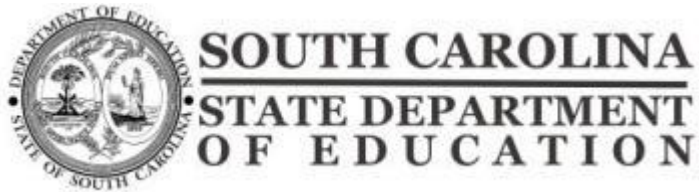
SC School Facilities Planning and Construction Guide

- Division 6 Plumbing
- Division 7 Mechanical
- Division 8 Electrical
- Division 9 Sample Forms



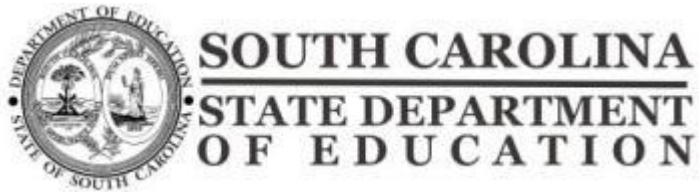
Division 1 General Requirements Significant Changes

- Addition of District Responsibilities to include items such as:
 - Responsibility for procurement
 - Coordination of contracted work
 - Application and cost of permits and other approvals
 - Hazard material testing
 - Establishing and ensuring district standards
 - Operational plans



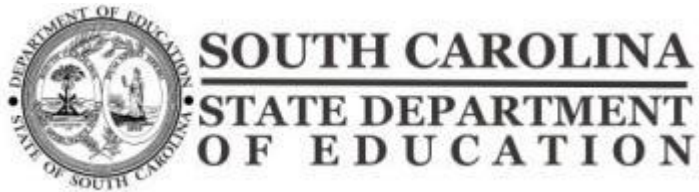
Division 1 General Requirements Significant Changes

- More specific information on inspections
 - Compliance with the code as represented on the design documents
 - Notification of District, Design Professional, Contractor and the OSF of code related deficiencies
 - The OSF is the final determination for code interpretations



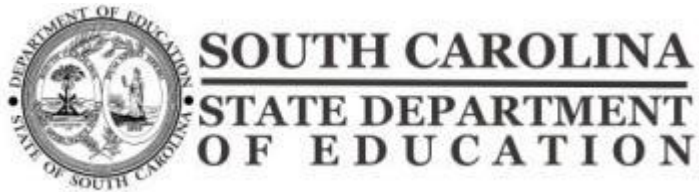
Division 1 General Requirements Significant Changes

- More detailed information for applicable codes and standards
- More detailed information for permits
- General Building, Material and System Requirements
 - UL Block, fire retardant treated wood
 - Vacant buildings and change of occupancy
 - Alterations



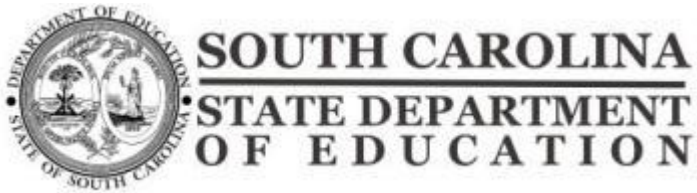
Division 1 General Requirements Significant Changes

- Board of Appeals
- Procurement
 - Alternate Delivery Methods permitted
- Other Related Standards
 - Sprinkler system approval by State Fire Marshal
 - SCDHEC regulations for demolition and hazardous material mitigation
 - OSHA including work place and chemical safety



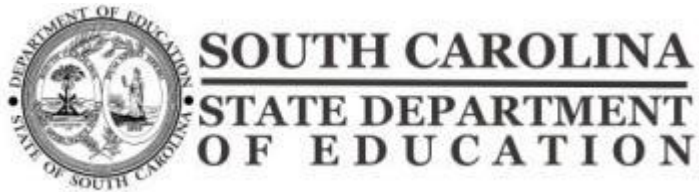
Division 1 General Requirements Significant Changes

- Waivers for Guide requirements
- Other Design Resources
 - CPTED - Crime Prevention Through Environmental Design
 - LEED and Green Globes
 - CEFPI – Council of Educational Facility Planners Internationals



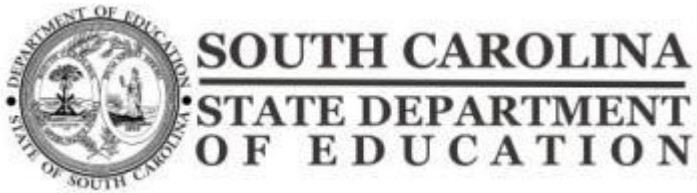
Division 1 Comments

- Code cannot be waived
 - Alternate means and methods allowed
 - Follow ESR for ceiling grid installation, if used
- If there is a difference of opinion interpreting code, the OSF makes the final determination
 - This determination is appealed to the Board of Appeals
- Only design professional can change plans and specifications and OSF approval may be required



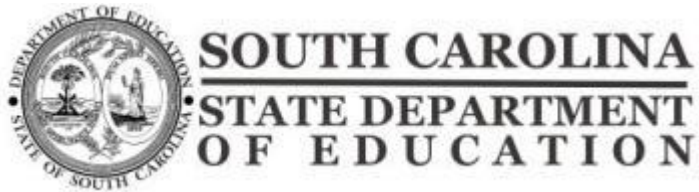
Division 2 Design and Construction Phase Significant Changes

- New F7 Transmittal Form
- Submittal information provided in list form



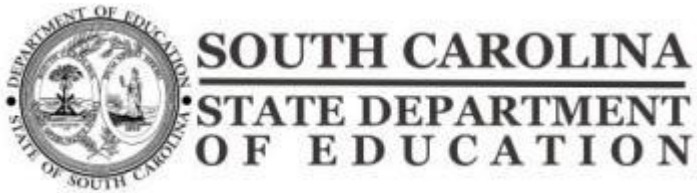
Division 2 Comments

- Early involvement of local first responders and zoning
- Plans and specifications changed after OSF approval requires resubmittal for approval
 - Submit addenda during bidding
 - Includes changes in phasing plans and alternates
- Electronic plan submittal



Division 3 Site Acquisition, Development and Disposal Significant Changes

- Submittal information provided in list form
- Greater emphasis on environmental and geotechnical analysis as part of due diligence



Division 3 Comments

- Traffic and parking management requires approvals when changes to parking lots, stacking loops and traffic patterns are planned
 - Adding relocatables
 - Change in fire department access
- Traffic management may change due to neighborhood and other external forces



Division 4 Design Criteria Significant Changes

- No minimum room size or width
 - Additional information provided in Best Practices for Instructional Spaces
- No mandatory storage rooms or casework
 - If provided, bubblers are not permitted to share a sink basin with hand washing
- No mandatory dedicated spaces such as a media center, gymnasium or art room



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Division 4 Design Criteria Significant Changes

- Rescue windows not required
- Kilns are required to be installed in accordance with their listing
- Book rooms, if provided, are to be designed in accordance with the code requirements for a storage room considering stacking height



Division 4 Design Criteria Significant Changes

- Individual classroom toilets
 - Required for self-contained classrooms
 - Optional for all other spaces
 - Accessibility requirements are applied
- Unisex toilets not permitted for instructional spaces serving students grade three and older, teacher lounges or visitor's areas
 - Private office facilities permitted
 - Unisex facilities required for accessibility



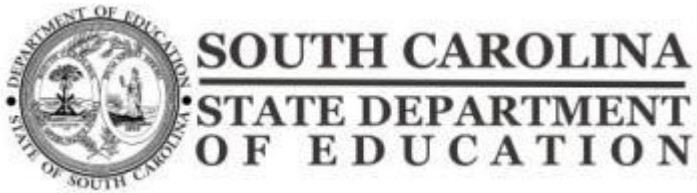
Division 4 Design Criteria Significant Changes

- Toilets as calculated by the Plumbing Code
 - Fixture counts for areas not simultaneously occupied may overlap with OSF approval
 - Toilets must be accessible during after hour activities
 - Toilets located in areas with restricted access do not count toward the code required fixtures



Division 4 Design Criteria Significant Changes

- Toilets for outdoor activities as calculated by the International Plumbing Code
 - All required accessible fixtures and at least 50% of other required fixtures must be located within a 200 foot travel distance on an accessible route
 - Directional signage to additional facilities required
 - Maximum travel distance to remote facilities is 500 feet
 - Facilities must be available during the activity



Division 4 Comments

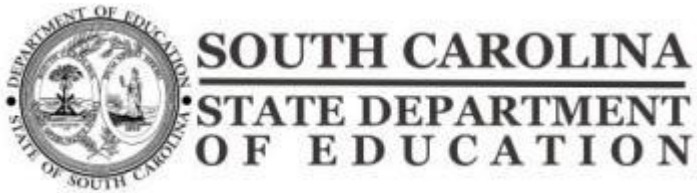
- Nothing in the Guide requires changes to existing buildings until repairs, renovation or other work is done
- Early childhood and kindergarten waiver
- Restricted use of interior classrooms
- Smoke detectors in K4 classrooms
- Fire alarm wiring in conduit



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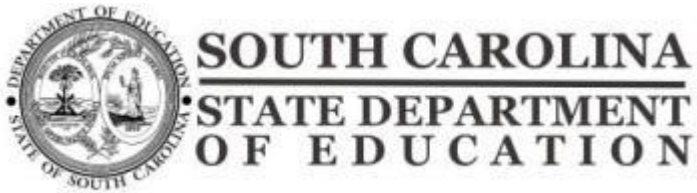
Division 5 Fire Protection Systems Significant Changes

- Fire sprinkler valves require electronic supervision



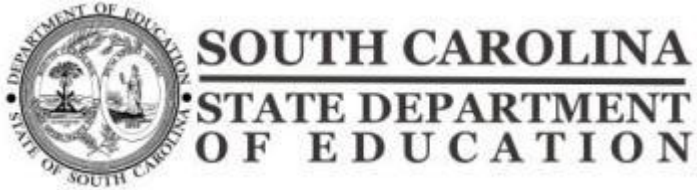
Division 5 Comments

- Sprinkler drawings, both above and below ground, requires approval from the SC Fire Marshal prior to the start of installation
- District must approve the location of risers, valves and inspector's test discharge
- Local fire department input on fire department connection and hydrant location



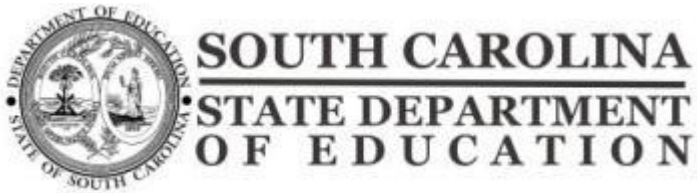
Division 6 Plumbing Significant Changes

- An emergency shutoff device for flammable laboratory gasses must be located in an accessible location within 5 feet of the exit closest to the instructor's table
- Rain water and grey water systems permitted with OSF prior approval
- PVC, CPVC and other non-metallic piping materials permitted above grade



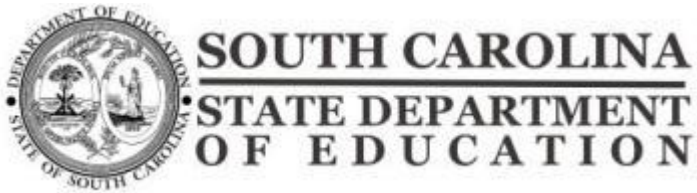
Division 6 Comments

- Food grinders and garbage pulpers restricted from septic systems in accordance with SCDHEC regulations
- Hot water for hand washing sinks may be omitted from group toilets



Division 7 Comments

- All sections of duct is required to meet Sheet Metal and Air Conditioning Manufacturer's Association (SMACNA) standards
- Minimal use of duct liner with OSF approval allowed



Division 8 Electrical Significant Changes

- Minimum illumination in accordance with Illuminating Engineering Society (IES) recommendations
 - 50 foot candles measured at 30” above finished floor
 - If an audiovisual scene is designed in the instructional space, minimum illumination level is 15 foot candles
 - Lighting calculations must be based on a maximum total light loss maintenance factor of 75%
- Remote Supervising Station Fire Alarm System permitted with OSF approved implementation plan
 - Changes to the plan requires OSF approval
 - A copy of the plan must be maintained with the annual inspection report



Division 8 Comments

- Emergency egress lighting for a minimum 90 minute duration is required in the following areas:
 - Gymnasium dressing or locker rooms
 - Administrative areas essential for emergency operations
 - Kitchens
 - Group Toilets
 - Laboratory preparation rooms
 - Classroom and instructional spaces
 - Spectator bleachers more than three rows high in athletic stadiums and playing fields with field lighting



Division 8 Comments

- Fire alarm cable must be installed in metallic conduit
- 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
- All K4 and younger classrooms must have smoke detectors in accordance with SCDHEC regulations



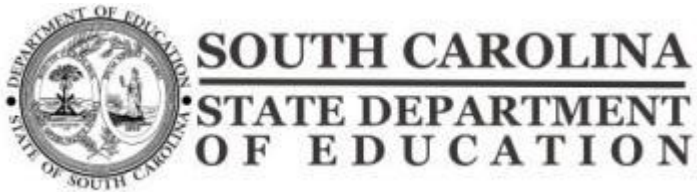
Division 9 Forms Comments

- F1 Request for Waiver from Use of Professional Services
 - Form is unchanged
 - Primarily used for roofing and other maintenance repair projects
- F2 Application for Approval of Property Acquisition
- F2A Evaluation for Approval of Property Acquisition
 - Formally an internal OSF form
- F3 Building Code Analysis Form
 - Expanded code information to be on final plans



Division 9 Forms Comments

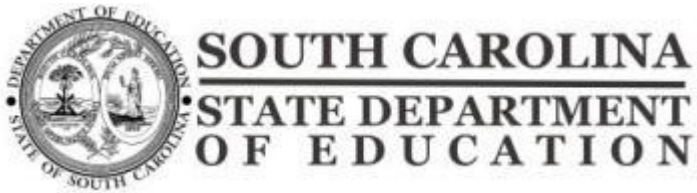
- F4 Certification of Readiness for OSF Occupancy Inspection
 - Form to request occupancy inspection
- F5 Square Foot Cost Information
 - Form to request project record information
- F6 School Transportation Information Form
- F7 Review Document Transmittal Form



SC Minimum Specifications Guide for Relocatable Classrooms

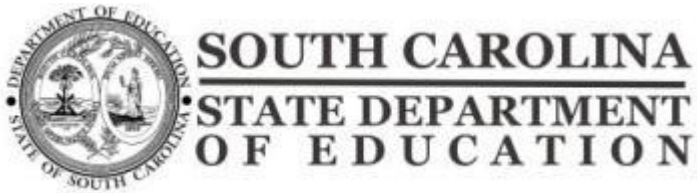
Requirements for New Units

- Requirements for Relocatables are the same as conventional buildings in accordance with Labor Licensing and Regulation Modular Building Program Requirements
- Foundation design for seismic areas simplified
- Site specific foundation required



SC Minimum Specifications Guide for Relocatable Classrooms

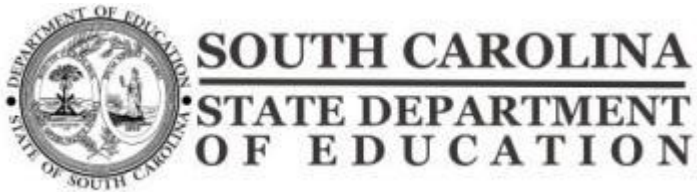
- No door hardware or construction material restrictions
- Unisex toilets not permitted for students above the second grade
- Opening protection for wind borne debris required without the use of wood panels



SC Minimum Specifications Guide for Relocatable Classrooms

Comments for New Units

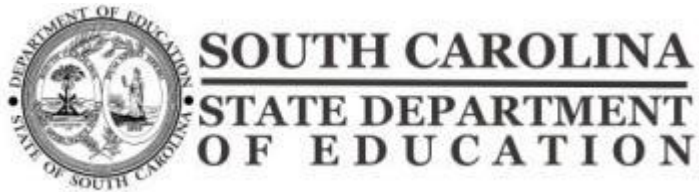
- Compliance with the codes, zoning and permitting
- Third party inspection
- OSF review and approval
- No hazardous use



SC Minimum Specifications Guide for Relocatable Classrooms

Requirements for Repurposed Units

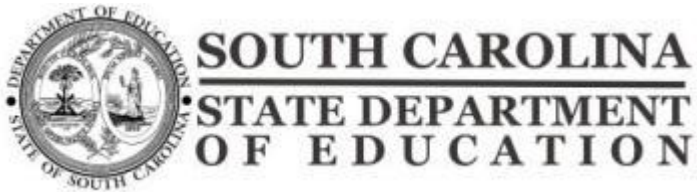
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SC Minimum Specifications Guide for Relocatable Classrooms

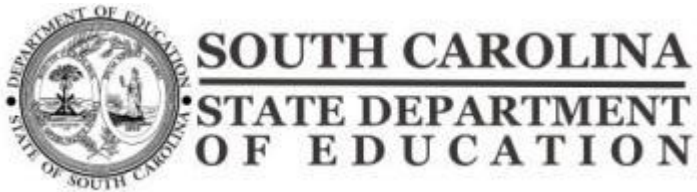
Comments for Repurposed Units

- Compliance with the zoning and permitting
- Third party inspection
- OSF review and approval
- No hazardous use
- Units cannot be moved without OSF review and approval even on the same property



SC Minimum Specifications Guide for Relocatable Classrooms

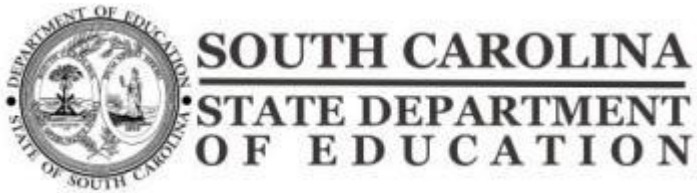
- Unisex toilets not permitted for students above the second grade
- Units that are moved require inspection and recertification to meet current code for structural seismic and wind requirements
- All new infrastructure is required to meet current code



SC Minimum Specifications Guide for Relocatable Classrooms

Other comments

- Units that remain in place are not required to be brought up to the latest code
- Units are required to be inspected annually to verify that all of the safety systems including the foundation and tie downs are in good working order
- Repairs and renovations to relocatables require OSF review and approval



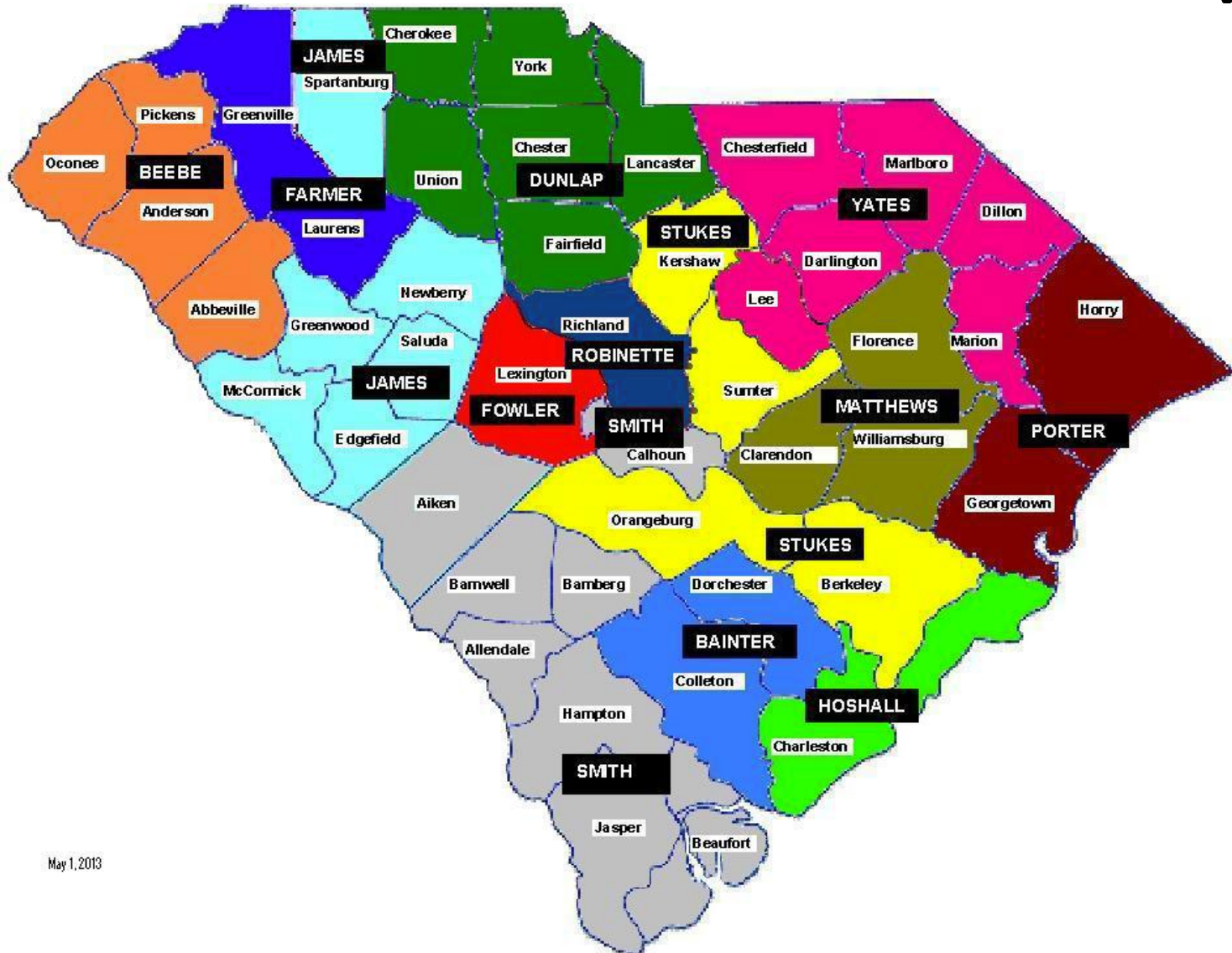
Other partners for your building

- Inspections by SCDHEC Food Safety
- Annual fire alarm testing
- Annual fire sprinkler system testing
- Local first responder coordination
- Inspections by the SC State Fire Marshal's Office



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SC State Fire Marshal Service Areas as of May 1

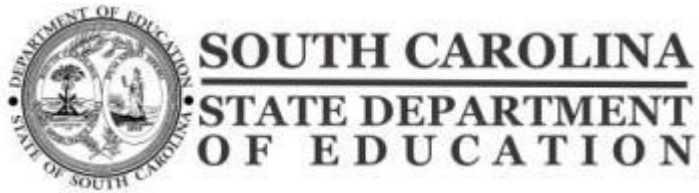


May 1, 2013



Planning for this Summer

- Update your emergency plans
- Projects for security enhancement require OSF review and approval
- Changing equipment under the kitchen hood requires OSF review and approval and may require significant alterations to your fire alarm system or hood suppression system
- Decorations and furnishings



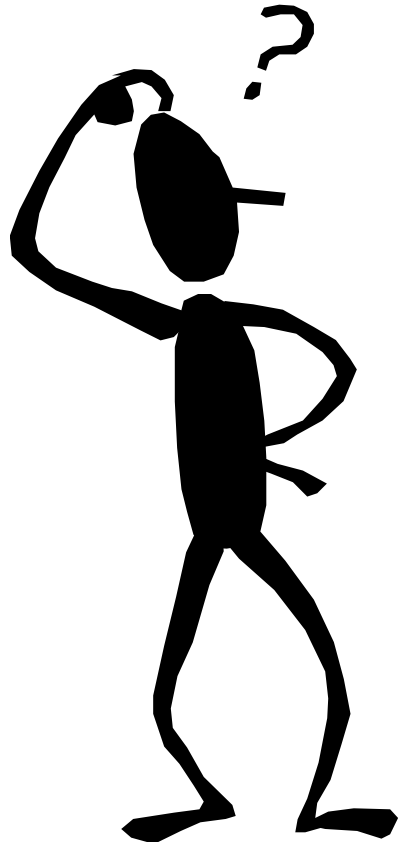
Other Items

- 2009 International Energy Code
- 2012 International Code Series
- Code Adoption Process
- South Carolina Building Code Modifications
- Electronic Plan Review and Database
- Annual Guide Revisions
- Inspector Program



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Questions?

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