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2013 SC School Facilities Planning and Construction Guide

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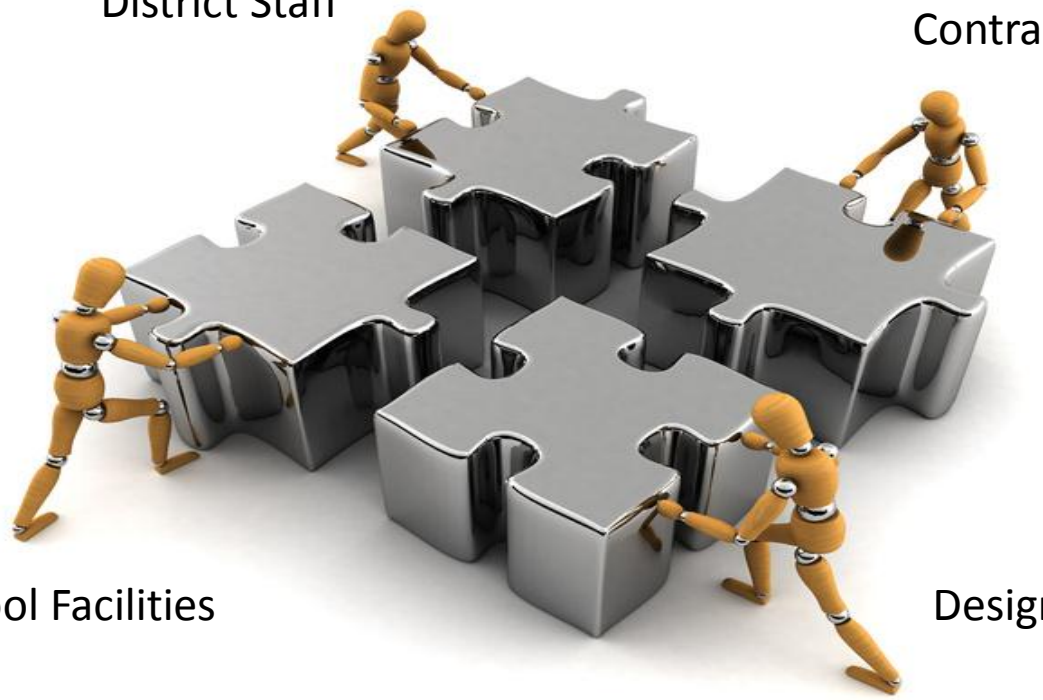
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Office of School Facilities

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

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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

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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

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South Carolina Public School Facilities Committee

Committee objective

- Simplify and Streamline Requirements
- Provide Flexibility

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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

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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

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Best Practice Guidance

Current guidance

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

Comments welcome

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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

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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

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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

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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

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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

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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

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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

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Division 2 Design and Construction Phase Significant Changes

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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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-metalic piping materials permitted above grade

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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

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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

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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

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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

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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

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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

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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

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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

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- 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

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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

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SC Minimum Specifications Guide for Relocatable Classrooms

Requirements for Repurposed 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

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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

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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

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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

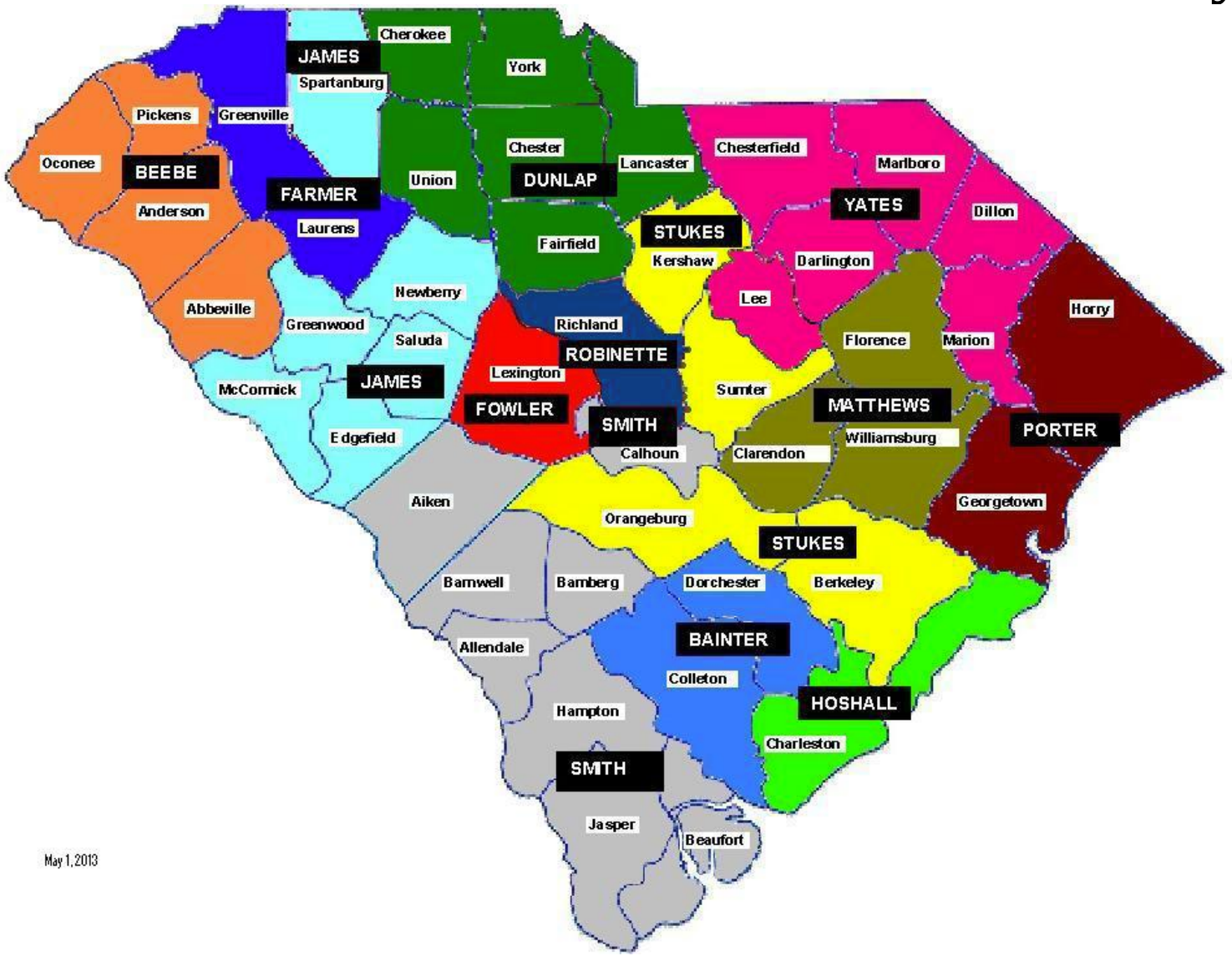
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Other partners for your building

- 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



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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

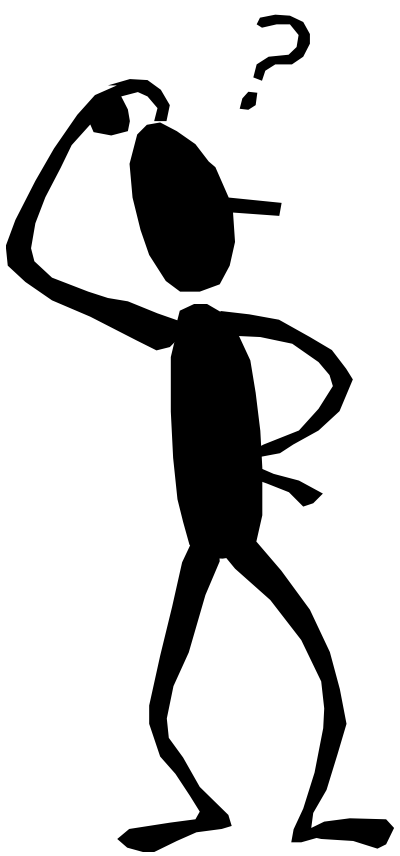
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Other Items

- 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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