

2012 SOUTH CAROLINA MINIMUM SPECIFICATIONS GUIDE FOR RELOCATABLE CLASSROOMS

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Abbreviations

AWS	-	American Welding Standard
ASCE	-	American Society of Civil Engineers
ANSI	-	American National Standards Institute
ARI	-	Air Conditioning and Refrigeration Institute
ASHRAE	-	American Society of Heating, Refrigeration and Air Conditioning Engineers
AWI	-	Architectural Woodwork Institute
FRTW	-	Fire Retardant Treated Wood
HVAC	-	Heating, Ventilation, Air-Conditioning
IAQ	-	Indoor Air Quality
IBC	-	International Building Code
ICC	-	International Codes Council
IEBC	-	International Existing Building Code
IECC		International Energy Conservation Code
IFC		International Fire Code
IMC	-	International Mechanical Code
KD	-	Kiln Dried
NFPA	-	National Fire Protection Association
NFRC	-	National Fenestration Ratings Council
O.C.	-	Obsolete Construction
OSF	-	Office of School Facilities
SFM	-	South Carolina State Fire Marshal
UL	-	Underwriters Laboratories, Incorporated

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2. RELATED STATUTORY AUTHORITY

- A. This revision supersedes all contents of the previous regulation titled *South Carolina Minimum Specifications Relocatable Guide for Relocatable Classrooms* dated 1993 and applies to all new and relocated existing relocatable buildings as of the date of adoption.
- B. SC Code §59-23-210 and SC Regulation 43-191 requires the South Carolina Department of Education to publish applicable standards and specifications for all construction, improvement and renovation of public school building and property.

3. PURPOSE AND COMPLIANCE

- A. To set minimum code, safety, and utility requirements for relocatable buildings regardless of manufacture, vendor, and/or contractor, and whether owned or leased. School Districts are encouraged to review information located on the Office of School Facilities website describing best practices for the of relocatable units.
- B. All manufacturers, vendors, and/or contractors shall obtain written approval of their product prior to entering into a contract with any school district for sale, lease, or erection of any relocatable building regardless of the source of funds used by the district. Request for approval shall be submitted in writing to OSF and shall include plans, specifications and other pertinent data in sufficient detail for evaluation and approval by OSF.
- C. Reference in this Relocatable Guide to any device, product or fixture by name, make or catalog number shall not be construed as limiting competition and the manufacturer/contractor may, at his option, use any device, product or fixture which has been submitted to the OSF and in its judgment, expressed in writing, is equal to that specified. If a catalog number listed in this Relocatable Guide is discontinued, a product of like quality shall be used. A request for substitution shall be submitted in writing and include complete data on the proposed substitution, substantiating compliance with the

specifications, including product identification and description, performance and test data, reference and samples where applicable. The decision as to whether a product is equal shall be determined by OSF.

4. PERMITTED USES

A. Relocatable buildings may be used for the purposes listed below.

- 1) Classrooms
- 2) Early Childhood and Kindergarten
- 3) Special Education Resource Rooms
- 4) Computer Labs
- 5) Study Halls
- 6) Group Toilets
- 7) Administrative Purposes
- 8) Self-contained special education classrooms are not recommended, but may be permitted if the units are modified to provide proper facilities for students.

B. Great care should be taken to assure that students with physical disabilities are placed in as safe a building as feasible. This may require consideration to remodel an existing classroom, in a permanent “noncombustible” building, in lieu of using a relocatable building. Prior to committing a relocatable building for such use, the OSF and the Office of Exceptional Children shall be contacted for their approval.

C. Relocatable buildings shall not be used for chemical laboratory classrooms serving students in grades 6 through 12.

5. DEFINITIONS

A. Relocatable Building. A building that is constructed entirely at a factory or onsite and can be moved from one location to another with relative ease. The building may require a minimum amount of construction for installation and connections. It includes prefabricated educational facilities that are designed to be relocatable, demountable, or reconstructable and primarily used as classrooms or other academic support purposes.

- B. Relocatable. The term relocatable and portable are interchangeable and both terms are used to describe buildings which are constructed to the same building codes as permanent public school buildings, except they are designed to be moved.
- C. New. A relocatable building not previously placed in service.
- D. Existing. A relocatable building previously constructed and currently in use. This Guide applies when existing relocatables are relocated on the same property or a different property.
- E. Temporary. A relocatable building used for less than three years to provide temporary space while permanent facilities are under construction, renovation, or remodeling.

6. CODES AND STANDARDS

- A. Design and construction must comply with the codes and standards, along with their published errata and other requirements listed in this section. If there is any conflict between the codes, standards, and/or regulations listed herein, the more stringent requirement controls. Designers and District reviewers should ensure they have the latest errata for indicated editions to International Codes, other codes and standards.
- B. Codes editions in force at the time of first submittal govern throughout the project, unless:
 - 1) Otherwise permitted by OSF; or
 - 2) Design is delayed for more than 12 months and OSF adopts editions that are more current in the interim.
- C. No project may use a code that is older than one previous adopted edition.
- D. In accordance with SC Code Ann §§ 1-34-10 thru 70 & § 10-1-180, OSF has adopted the following codes with all SC Modifications as promulgated by the Building Codes Council:
 - 1) International Building Code (IBC), 2006 Edition,
 - 2) International Existing Building Code (IEBC), 2006 Edition,
 - 3) International Fire Code (IFC), 2006 Edition,
 - 4) International Energy Conservation Code (IECC), 2006 Edition,

- 5) International Fuel Gas Code (IFGC), 2006 Edition,
- 6) International Mechanical Code (IMC), 2006 Edition,
- 7) International Plumbing Code (IPC), 2006 Edition, with the following insertions:
 - a) Section 305.6.1, insert “24” and insert “24”
 - b) Section 904.1, insert “8”
- 8) International Private Sewage Disposal Code (IPSDC), 2006 Edition,
- 9) International Property Maintenance Code (IPMC), 2006 Edition,
- 10) National Electrical Safety Code, ANSI-C2-2007 Edition
- 11) ASHRAE 62, latest edition
- 12) ASHRAE 90.1, latest edition
- 13) 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 Agency 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/>
- 14) State Fire Marshal rules, regulations, and policies. See <http://www.scfiremarshal.llronline.com/EngServices/index.asp?file=AdoptedStandards.htm>
- 15) International Code Council Performance Code (ICCPC), 2006 Edition, upon Director of OSF written approval.
- 16) 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).
- 17) The South Carolina Modular Buildings Construction Act S.C. Code § 23-43-10 et. Seq.

7. APPROVAL OF MANUFACTURER

- A. The district may wish to lease or purchase relocatable buildings. The buildings must conform to the requirements and code in place at time of manufacturer. All buildings require review and approval by OSF before a final contract is awarded. The procurement and contract must conform to district procurement policy. The District should evaluate lease periods greater than five years and determine if it is more economical to purchase rather than lease.
- B. OSF will accept submittals from relocatable manufacturers and, after review and if the relocatable meets the minimum requirements of the code and this Guide, the manufacture will be placed on a pre-approved list for each unit type submitted and approved. This list will be made available to all of the school districts in the state. This review does not include any aspect of the manufacturer or the relocatable beyond compliance with the code and this Guide.
- C. Each manufacturer may submit plans on any type or size of relocatable building.
- D. School districts utilizing relocatable buildings that have been pre-approved will save time on the approval and procurement process. Districts utilizing relocatables that have not been pre-approved need to factor in time for OSF review and approval of the building plans in their procurement and construction schedule.
- E. For approval to sell or lease relocatable buildings to South Carolina school districts, OSF requires the following:
 - 1) Copies of complete construction documents and specifications as outlined in this Relocatable Guide.
 - 2) Copies of inspection reports and certifications for compliance during construction.
 - 3) Copies of manufacturers' unlimited General Contractors License, with a Building Classification, regardless of the dollar amount of contracts. Information may be obtained from:

Contractor's Licensing Board
110 Centerview Drive
Columbia, South Carolina 29210
803-896-4686

- F. Review for continued approved status will be made by OSF to ensure compliance with current regulations. This review will occur annually unless otherwise warranted by problems with a manufacturer.
- G. The OSF shall remove a manufacturer from the pre-approved list, permanently or temporarily, if it is determined to be in the best interest of the school districts. Whether a manufacturer is removed permanently or not will be considered on an individual case basis and is dependent upon the type of problem or problems involved.
- H. Each unit shall have, permanently attached, a certification label as required by SC Code §23-43-80 with the following data:
 - 1) Name and address of manufacturer
 - 2) Identifying number
 - 3) Month and year of manufacturer
 - 4) Applicable Relocatable Guide edition

8. NEW RELOCATABLE BUILDINGS

- A. This section applies to the construction of new relocatable buildings. All new relocatable buildings shall be designed and constructed in compliance with the building codes and standards listed in Section 6. The requirements for new relocatable buildings contained herein are in addition to the requirements of the listed building codes and standards.
- B. Regardless of cost, fund source, use or procurement method, complete construction specifications, plans and documents for relocatable buildings shall be prepared by South Carolina registered designed professionals and submitted to OSF as the authority having jurisdiction for review and approval for compliance with South Carolina laws, rules, building and life safety codes and this Guide prior to manufacture. Licensed personnel shall construct the buildings.
- C. Plans, specifications and other documents submitted for review shall have seals and registration number permanently affixed as required by law. Indicate scale on plan. If sealed plans are not required, a dimensional sketch may be submitted. Plans shall include at least:
 - 1) Pier location plans
 - 2) Foundation and tie down plans

- 3) Site plans including boundaries and property lines, access, utilities and adjacent structure(s)
 - 4) Building plans including floor, roof and structural plans
 - 5) Toilet locations, travel distance and fixture count if building facilities will be used
 - 6) All 4 Elevations
 - 7) Wall Sections
 - 8) Mechanical & Plumbing Plans
 - 9) Electrical Plan
 - 10) Specifications
 - 11) Programmatic information such as the proposed use of the relocatable classroom unit(s), the grade level and number of students to be housed in each proposed unit, and the anticipated length of time the unit(s) will be used.
 - 12) Emergency and hazardous weather communication plan.
- D. Engineered foundation plans for support, tie down, seismic and wind resistance shall be required as a part of the approval of any relocatable.
- 1) Districts may develop master plans designed to be used with any relocatable building in the district. At the district's request, OSF will maintain a copy for future reference.
 - 2) Foundations and tie downs for relocatable buildings may be designed utilizing only force considerations in the code when the distance from the top of grade to the top of cmu does not exceed 32". For areas not in Seismic Category D or with wind speeds of 110 mph or more, the structural engineer may propose a height exceeding 32" for OSF review and approval under the provisions of the code for alternate means and methods.
- E. All exterior doors shall open onto a minimum 5 foot by 5 foot platform level with the interior floor and with handrails, guardrails, steps and ramps constructed from aluminum or pressure treated wood. Aluminum shall be 6000 series aluminum alloy with 6061-T6 for primary structural components. Landings, ramps and steps shall be designed for a minimum uniform live load of 100 pounds and a concentrated vertical load of 300 pounds distributed

uniformly over an area of 1 square foot. Guardrails and handrails shall be designed to resist a single concentrated load of 200 pounds applied at any point and in any direction. The walking surface of the ramp and landings shall be continuous, without gaps and shall have a slip resistant surface with a coefficient of friction of 0.50 in all directions. If wood construction is used, it shall be assembled with deck screws.

F. Toilet Facilities

- 1) Toilet facilities shall be required within all units serving students through the second grade.
- 2) When the relocatable is used by pupils of grades 3 through 12 inclusive, toilet facilities shall be required when either girls or boys existing restroom facilities are more than 200 feet away as measured by walking distance or the fixture count in the existing facilities will not support additional load regardless of distance of the relocatable.
- 3) Each toilet facility located in a relocatable shall have a water closet and lavatory that complies with ICC/ANSI A117.1.
- 4) For each toilet area, provide an exhaust fan, with built-in overload protection, automatic backdraft damper, interior wall grille, telescoping wall sleeve, exterior wall cap, wall switch, and UL label. Install fan in exterior wall of buildings as high as practical.

G. Fire Safety Requirements

- 1) Relocatable buildings may have a stand alone fire alarm systems as allowed by the code.
- 2) If a fire alarm is installed in a relocatable building, wiring within the building shall be routed metallic conduit.

H. Code required inspections during construction shall be provided by third party inspection providers in accordance with the OSF approved inspection plan. Foundations, steps, decks, and ramps (if required) shall be inspected by a Chapter 1 inspector. Seismic and wind tie downs shall be inspected by a Chapter 17 inspector. Copies of the Chapter 1 and Chapter 17 inspection reports shall be submitted to OSF before final inspection.

I. An inspection of life safety systems prior to occupancy shall be conducted by the SFM and OSF.

9. DISTRICT CONSTRUCTION

- A. A district may construct a relocatable building using its own maintenance forces, vocational students, and/or outside subcontractors. The district acting as its own contractor shall be permissible under certain conditions and shall comply with the requirements of the S.C. Contractor's Licensing Board.
 - 1) Prior approval shall first be obtained from OSF. Written request must include cost of the work, qualifications of all persons supervising the work and the third party inspection plan.
 - 2) Complete architectural and/or engineering services shall still be required.
- B. The district should consult legal counsel about contracts, bonds and insurance requirements for any subcontractors engaged as well as insurance requirements, use of student labor, and any other matters wherein liability could be incurred.
- C. All plans, specifications and construction shall comply with the requirements of the Guide.
- D. Construction may not start until plans and specifications have been approved by OSF.

10. RELOCATION OF EXISTING RELOCATABLE BUILDINGS

- A. Relocatables meeting the "Satisfactory" criteria as defined in the *Relocatable Annual Inspection Guide* may be moved and installed for use. Any modifications for reuse must be made in accordance with the current code. Districts are advised to consult with a design professional for evaluation of the relocatable prior to starting work.
- B. The new foundation, tie downs and access to the unit including lighting, utilities, walkways, ramps and steps must comply with requirements for a new installation.
- C. Submit plans and specifications for the site and exterior along with as-built information and any modifications for the relocatable to OSF for approval prior to installation.
- D. Provide third party inspections as required for a new installation. The relocatable requires inspections by OSF and the SFM prior to occupancy.