# Minimum Design Criteria for New Construction Single Family Houses

The following minimum design requirements are for all newly constructed single-family dwelling units constructed under the applicable South Carolina Residential Code.

These Minimum Design Standards are used as a guideline to meet and exceed all applicable local, state and national codes. These standards also serve as a vehicle to promote modern construction and design practices for builders, contractors and design professionals who wish to utilize funding from SDOT.

## **General Requirements**

- 1. **Unit Size Requirement:** The following minimum square footage measurements are required (square feet are the heated and cooled area of the unit)
  - Two-bedroom two-bathroom units: shall contain a minimum of 1,000 square feet
- 2. Codes: All construction shall comply with applicable code and standards listed:
  - Current version of South Carolina Residential Code in effect at start of construction or permit application
  - Local planning and zoning requirements
- 3. **Soil Treatment/Termite Protection:** An appropriate termite inspection and treatment of all property is required.
  - Inspection/treatment must be completed by a licensed exterminator who shall report any termite activity located and treatment applied
- 4. **Quality Assurance:** General Contractors and/or subcontractors shall furnish a written material and labor warranty on all units for a period not less than one full year

#### 5. Exterior Concrete:

- Homes located in a subdivision, required by zoning regulation or subdivision restrictions to have a paved driveway, shall have driveways meeting one of the following minimum standards:
  - Asphalt parking/driveway: Asphalt shall consist of a hot mix asphaltic concrete pavement, manufactured by plants and be placed a minimum of 2" thick over a compacted 4" crushed stone base
  - o Concrete parking/driveway: Minimum concrete thickness shall be 4" thick
- Concrete for walks, porches and stoops shall be minimum 3 1/2" thick

### 6. Roof Covering:

- Shingles: Seal tab type over 15 lb. felt, with minimum 25-year product warranty or longer
- 7. **Siding:** Exterior siding shall consist of one or more of the following materials.

- Composite: Fiber cement siding, primed, with two-coat minimum finish or manufacturer's finish
- Metal: 26-gauge minimum thickness aluminum or galvanized steel with manufacturer's finish
- Vinyl: 0.042" minimum thickness, UV protected
- Wood: Cedar or redwood stained or primed once with 2-coat minimum finish
- Brick Veneer: Shall be ASTM C 216, Type FBS, Grade SW, or equivalent, modular size
- 8. Windows: All windows shall meet the following requirements
  - All window frames must be of solid vinyl, thermally broken aluminum, fiberglass, wood or wood clad
  - Glazing shall be minimum double-paned
  - All windows shall meet or exceed the South Carolina minimum code requirement

### 9. Appliances:

- A refrigerator shall be provided in all units
  - o All refrigerators must be Energy Star qualified. The Energy Star mark must be clearly marked on the product, or displayed in product literature.
- Range: A range shall be provided in all units
- Dishwasher: A dishwasher shall be provided in all units
- Laundry: All homes shall be equipped with washer and dryer hookups

#### 10. Water Heater Efficiency:

- Electric water heaters shall have a minimum Energy Factor (EF) equal to or greater than 2.0
- Gas fired water heaters shall have an EF equal to or greater than 0.67
- Instantaneous gas water heaters shall have an EF equal to or greater than 0.82.
- 11. **Countertops:** Countertops shall be molded roll-backed, laminate plastic or Formica with finished ends and sealed at the cut out for sink. Other materials may be used such as ceramic, solid surface or granite
- 12. **Closet Storage/Accessories:** Clothes closets shall contain a 12" deep shelf, including a coat rod. Shelves with integrated hangar hooks may also be used

# **Safety Features**

- 1. **Fire Detection and Alarm:** Installation of electrically powered smoke alarms is required and must be installed according to manufacturer's instructions
- 2. Carbon Monoxide Alarms: UL listed carbon monoxide alarm(s) shall be installed outside each sleeping area