

Appendix A:

SC Housing Essential Property Standards

I. General Requirements.

1. Sponsors must have an inspection of the property completed to identify **SC Housing Essential Property Standards** violations prior to submitting the **Preliminary Scope of Work Inspection**.
 - a. The **Essential Property Standards** inspection is to be commissioned by the sponsor and completed by a South Carolina LLR licensed Residential Builder-RBB contractor or a South Carolina LLR licensed Home Inspector professional.
 - b. A full inspection report with photos completed by the Home Inspector or Residential Builder must be submitted with the **Essential Property Standards Checklist**.
 - c. An **HTF-2E Essential Property Standards Checklist** will be provided for this purpose and will be required to be part of the case file.
2. All units rehabilitated with SC HTF funds must meet or exceed all SC Housings Essential Property Standards requirements.
3. No unit rehabilitated with SC HTF funds shall retain threats to the health, safety of the occupants or to the structural integrity of the unit after repair are completed.
4. All rehabilitation or repair work funded by SC HTF must meet or exceed South Carolina Building Code standards, and all local permitting and inspection requirements.
5. In those jurisdictions with an adopted minimum housing code, all units rehabilitated with SC HTF funds must meet or exceed those local codes, rehabilitation standards, ordinances and zoning ordinances upon completion of rehabilitation.
6. It is the Sponsors responsibility to advise beneficiary's / homeowners of proper care and maintenance of equipment and materials installed with SC HTF funds. Examples include when and how to change HVAC filters, how to set thermostats, when and how to use bath and kitchen exhaust fans, when and how to clean and/or replace range hood filters, how to test and reset GFCI breakers/outlets, and when to have HVAC equipment serviced, cleaned and tuned.

II. SC Housing Essential Property Standards

A. SITE HEALTH AND SAFETY STANDARDS

Site. The site components must be free of health and safety hazards and be in good repair.

1. Property Access and Egress.

- a. The property must be able to be accessed without unauthorized use of other private properties.
- b. Roads and or driveways shall be accessible and passable for first responders. For e.g. large holes, ruts or overhanging trees or limbs blocking access by vehicle's are not acceptable.

- c. Roads, driveways, parking spaces and sidewalks required for egress shall have no tripping hazards greater than 3/4" and all must be free of health and safety hazards.
- d. Exterior porches, decks, platforms and/or steps shall be provided at all exits and must be free of health and safety hazards.
- e. Every porch, deck and or platform located at more than thirty (30) inches above the adjacent finished grade shall be equipped with guardrails not less than thirty-six (36) inches high.
- f. All stairs/steps shall be equipped with handrails and railings regardless of the number of treads. Handrails and railings shall be constructed with moisture resistant materials.

2. Infrastructure: Utilities & Storm/Site Drainage.

- a. Electrical supply/services. Every dwelling unit shall be connected to an approved public service. All electrical lines must be a minimum of 8' above finished grade.
- b. Water supply. Every dwelling unit shall be connected to an approved public or private water supply.
- c. Sewage. Every dwelling unit shall be connected to an approved sewage disposal system either public sanitary sewer or septic systems that is sanitary and free from contamination.
- d. Drainage. Every yard/lot shall be properly graded so as to obtain positive drainage away from the buildings to prevent the accumulation of stagnant water in the yard or under the structure. Gutter and downspouts, if installed, shall be provided to properly collect, conduct and discharge the water from the roof and away from the structure.

3. First Responder Safety.

- a. Site Address. Must be in place at the road either on the mail box or address post, must be visible from both directions, must be a minimum of 4" in height boldface and the color must contrast its background.
- b. Building Address numbers. Must be in place beside or on the front entry door not above the door, must be plainly legible and visible from the street or road fronting the property, must be 4" in height boldface and the color must contrast its background.

4. Sanitary Conditions.

- a. Sewage. There shall be no septic tank or sewer backups or discharging on the ground.
- b. Infestations. There shall be no infestations of vermin or rodents.

5. Hazardous Site Conditions

- a. The site must not be subject to adverse natural or manmade environmental conditions such as but not limited to;
 - i. Unsafe or blighted accessory structures/ outbuildings and equipment.
 - ii. Abandoned vehicles, accumulations of garbage, trash and or debris.
 - iii. Septic tank or sewer hazards such as broken or missing lids, covers or pipes.
 - iv. Soil/geologic instability, soil erosion (washouts), flooding, poor drainage, storm drainage issues, mud or rockslides.

- v. Fire hazards.
- b. Fencing and retaining walls must be free of health and safety hazards and in good repair.

B. STRUCTURAL STANDARDS

General. The dwelling unit and accessory structures must be structurally sound. The structure must not present any threat to the health and safety of the occupants and must protect the occupants from the environment. Any structural issue uncovered during the execution of the scope of work must be addressed for the health, safety and protection from the environment of the occupants.

Major Building Structural Systems shall have the following Remaining Useful Life (RUL). Foundation, Floor System, Walls, Ceilings, Roof System and Chimneys must have a RUL of twenty (20) years. Stairs, Porches and Decks must have a RUL of ten (10) years. Roof coverings must have a RUL of ten (10) years.

Additions and or alterations to dwelling units and or structures that are not completed/ finished or where not completed following SC Building Codes including permitting are subject to disqualification from the program.

Termite damage. Any dwelling unit or structural component that has active termites or has had termite damage is not eligible for repair or replacement in the Essential Home Repair Program, unless 100% of the extent of the damage can be documented and warranted by a termite professional and all of the repairs or replacement cost are within financial limitations.

1. Foundation.

- a. The foundation shall be on firm, reasonably dry ground.
- b. There shall be no tree, tree roots, shrubs or shrub roots growing under, on or in the footings or foundation that poses structural integrity issues.
- c. There shall be no water standing or running with in or beside the foundation and/or under the building.
- d. The foundation shall have no defects that may result in water infiltration or vermin infestation.
- e. The foundation must not have any defects such as leaning, buckling, sagging, cracking or defects that may result in unsafe structural conditions.
- f. All elements of the foundation including footings, piers, underpinning and masonry, shall be in good repair. Piers shall be sound.
- g. There shall be no wood stiff-knee piers or other improper piers.
- h. No isolated masonry pier shall exceed (10) times the least dimension.
- i. Underpinned units shall use an approved material so as to be substantially weatherproof and rodent-proof.
- j. Units with a crawl space will have a crawl space access, with appropriate and functioning cover.
- k. Adequate ventilation shall be provided to the foundation area by foundation vents or other approved methods.

2. Floor System.

- a. Floor systems shall be in sound condition and good repair and shall be safe to use.
- b. The floor shall not be seriously out of level.
- c. Floor joists and supporting members shall provide sufficient support.
- d. Overloaded sills, beams, girders and joists are prohibited. The floor system must provide structural support as required by the SC Building Code.
- e. There shall be no visibly rotten, termite damaged, fire damaged, broken, or sagging sills beams, girders or joist.
- f. There shall be no loose, visibly rotten, termite damaged, fire-damaged, broken or sagging subfloor sheathing and or decking.

3. Walls.

- a. The studs/ walls must provide structural support as required by the SC Building Code.
- b. All load bearing walls, exterior and interior, shall not be bowed or seriously out of level.
- c. Walls must not have any defects such as large holes, loose surface materials, severe buckling, missing parts, or other serious damage.
- d. There shall be no visibly rotten, termite-damaged, fire-damaged or broken studs.

4. Ceilings.

- a. The ceiling must provide structural support as required by the SC Building Code.
- b. The ceiling shall not be seriously out of level.
- c. There shall be no visibly rotten, termite damaged, fire damaged, broken or sagging, ceiling joists.
- d. Attic spaces shall have attic access of a minimum of twenty-two by thirty-two inches (22" x 32").
- e. Attic flooring shall be in sound condition be safe to use and capable of supporting the load which normal use may cause to be placed upon them.

5. Roof System.

- a. The roof system must provide structural support as required by the SC Building Code.
- b. There shall be no visibly rotten, termite damaged, fire damaged, broken, or sagging rafters.
- c. There shall be no improperly supported rafter ends.
- d. Rafters shall be adequately braced.
- e. There shall be no loose, visibly rotten, termite damaged, fire-damaged, broken or sagging roof sheathing and or decking.
- f. The roof covering must be waterproof preventing moisture from entering the dwelling.
- g. There shall be no loose or damaged roof coverings.
- h. There shall be no roof with more than two (2) roof coverings.
- i. Attics shall be properly ventilated.

6. Chimneys.

- a. There shall be no chimneys or parts thereof which are defective, deteriorated or in danger of falling, or in such condition or locations as to constitute a fire hazard.
- b. All existing hanging masonry chimneys shall be removed or reattached.

7. Stairs.

- a. Stair systems shall be in sound condition and be safe to use.
- b. The stair stringers, supports, treads and risers must provide structural support as required by SC Building Code.
- c. A flight of stairs that has settled more than one (1) inch out of its intended position or pulled away from supporting or adjacent structures are prohibited.
- d. There shall be no loose, visibly rotten, termite damaged, fire damaged, broken, or sagging stair system component.

8. Porches, Decks and Ramps.

- a. Post, sills, beams, girders and joist must provide structural support as required by SC Building Code.
- b. The porch, deck or ramp shall be in sound condition and good repair and shall be safe to use.
- c. There shall be no loose, visibly rotten, termite damaged, fire damaged, broken, or sagging, bowed or serious out-of-level post, sills, beams, girders, joist, decking or railing.

C. DWELLING HEALTH AND SAFETY STANDARDS

Dwelling. All areas and components of the housing must be free of health and safety hazards and be in good repair.

1. Dwelling Access.

- a. The dwelling unit must be able to be used and maintained without unauthorized use of other private properties.
- b. Exterior porches, decks, platforms, ramps and/or steps shall be provided at all exits and must be free of health and safety hazards.
- c. Every porch, deck and or platform located at more than thirty (30) inches above the adjacent finished grade shall be equipped with guardrails/ railings not less than thirty-six (36) inches high and shall be constructed with moisture resistant materials.
- d. All stairs, steps and ramps shall be equipped with handrails and or railings regardless of the number of treads or length of ramp.
 - i. Every rail shall be firmly fastened and maintained in good condition.
 - ii. Exterior handrails and railings shall be constructed with moisture resistant materials.
- e. Every stair riser shall be reasonably uniform and shall not exceed eight and one-fourth (8¼) inches in height and shall be securely fastened in position.

- f. Access shall be provided to all rooms within a dwelling unit without passing through a public space.
- g. Access to toilet and bathing facilities shall be through a weather-tight area without going outside the building.

2. Dwelling Egress.

- a. Safe, continuous and unobstructed egress shall be provided from the interior of the structure to the exterior at street or grade level.
- b. Each dwelling unit must provide two (2) means of remote egress.
- c. Every sleeping room must have at least one (1) openable window approved for emergency egress that meets the following;
 - i. The window must be operable from the inside without use of a key or tool.
 - ii. The window sill height must not exceed forty-four (44) inches above the floor.
 - iii. The window must provide a minimum clear opening height of twenty-four (24) inches and a minimum clear opening width of twenty (20) inches.
 - iv. The window in normal operation opened total net clear opening shall not be less than five (5) square feet.
 - v. Bars, grills, storm windows or other obstructions placed over these windows must be releasable or removed from the inside with the use of reasonable force/dexterity and without the use of a key or tool.

3. Dwelling Security.

- a. All exterior doors of the dwelling unit must be lockable.
- b. All windows located on the first floor, at the basement level, on a fire escape, porch, above a roof line or other outside space that can be reached from the ground and that are designed to be opened must have a locking device.
 - i. Windows with sills less than six feet off the ground are considered accessible.
 - ii. Traditional window locks, those provided by storm/screen combination windows and window pins are acceptable.
 - iii. Windows required to meet egress or ventilation requirements may not be permanently nailed shut.

4. Dwelling Hazardous Conditions.

- a. **Lead.** Dwellings built before January 1, 1978 must comply with all requirements related to the evaluation and reduction of lead-based paint hazards and have available proper certifications of compliance (see The EPA's 2008 Lead-Based Paint Renovation, Repair and Painting Rule (as amended in 2010 and 2011). The regulations for residential property renovation are located at 40 CFR 745, Subpart E.).

[Lead-Based Paint Abatement and Evaluation Program: Overview | US EPA](#)

- b. **Asbestos.** All dwellings must comply with all requirements related to the evaluation and reduction of asbestos hazards and have available proper certifications of compliance (see SC DEHEC Regulation 61-86.1).
- c. **Mold.** There shall be no presence of mold. Mold is unacceptable and must be addressed. Surface areas affected with mold of less than ten (10) square feet shall be remediated per the National Center for Healthy Housing protocol “Creating a Healthy Home”
(http://www.nchh.org/Portals/0/Contents/FloodCleanupGuide_screen_.pdf)
Surfaces areas affected with mold of more than ten (10) square feet shall be remediated by a certified mold remediation company.
- d. **Radon.** All dwellings located in Greenville county must be tested. If results are at or above 4 pCi/L remediation is required and must be in compliance with ANSI/AARST MAH 2019 and SGM-SF 2017 with 12/20 revisions.
(<https://standards.aarst.org/MAH-2019/index.html>)
(<https://standards.aarst.org/SGM-SF-2017/index.html>)
- e. **Interior Air Health Threats.** The dwelling unit must be free of air pollutant levels that threaten the occupants’ health, including carbon monoxide, propane, natural gas, methane gas, sewer gas, fuel gas, dust, and other harmful pollutants and toxins.
- f. **Tripping Hazards.**
 - i. There shall be no loose flooring or floor covering.
 - ii. There shall be no loose thresholds or transition strips.
 - iii. There shall be no change in height greater than ¼” on the flooring system.
 - iv. There shall be no dirt floors or wood floors on the ground.

5. Dwelling Sanitary Hazards.

- a. There shall be no evidence of infestation of vermin or rodents.
- b. There shall be no accumulations of garbage, trash or debris.
- c. There shall be no hoarding of any kind. The dwelling floors, walls, ceilings, basements, crawl spaces and attics must be 100% accessible, inspectable and viewable.

6. Fire Safety.

- a. Each unit must be equipped with a 5 lb. ABC rated dry chemical fire extinguisher readily accessible in the kitchen and mounted to accommodate handicapped accessible height. If contained in the cabinet/pantry area must have proper signage, 4” X 3” minimum identifying the location.
- b. Liquid fuel and other combustibles stored on the premises shall be stored in accordance with the provisions of the South Carolina State Building and Fire Code and any other applicable codes or regulations.
- c. Hearths shall be of noncombustible material and shall extend at least twelve (12) inches beyond the face and six (6) inches beyond each side of the fireplace opening. No combustible materials shall be permitted within seven (7) inches of the top and seven (7) inches on either side of the fireplace opening.
- d. No holes shall be permitted in the flue/vent of any fuel-burning equipment or waste pipe except for necessary vent connections and clean-out doors.

- e. Existing chimneys shall be tight, safe and capable of maintaining proper draft of combustion by-products to outside air. Thimbles shall be grouted tightly and shall be located high enough to provide proper draft for the heating appliance served thereby.
- f. No combustible material shall be located within six (6) inches of the thimble.
- g. There shall be no cardboard, newspaper, or other similar highly combustible wall finishes.
- h. There shall be no paper, cardboard, newspaper, fabric or other highly combustible materials stored in on or around electrical or heating equipment such as the electrical panel box, water heater, furnaces, air handlers etc.

7. Smoke and Carbon Monoxide Alarms.

a. Smoke Alarms shall be in proper operating condition, less than 10 years old and installed in the following areas as required by Section R314:

- i. In each sleeping room
- ii. Outside of each sleeping area in the immediate vicinity of the bedrooms.
- iii. One each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and unhabitable attics.
- iv. Smoke alarms shall be installed not less than three (3) feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by this section.
- v. Ionization smoke alarms shall not be installed less than twenty (20) feet horizontally from a permanently installed cooking appliance. Unless this would prevent placement of a smoke alarm in a location required above.
- vi. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than ten (10) feet horizontally from a permanently installed cooking appliance. Unless this would prevent placement of a smoke alarm in a location required above.
- vii. Photoelectric smoke alarms shall not be installed less than six (6) feet horizontally from a permanently installed cooking appliance. Unless this would prevent placement of a smoke alarm in a location required above.

b. Carbon Monoxide Alarms are required in units that:

- i. Dwellings that contain a fuel-fired appliance.
- ii. Dwellings that has an attached garage with an opening that communicates with the dwelling units.

c. Carbon Monoxide Alarms shall be in proper operating condition, less than 10 years old and installed in the following areas as required by Section R315:

- i. Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- ii. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

d. Combination alarms.

- i. Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of individual smoke and or carbon monoxide alarms.

e. Interconnection of Smoke and Carbon Monoxide Alarms.

- i. Where more than one smoke or carbon monoxide alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

f. Power Source.

- i. Smoke and Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.
- ii. **Exception:** Hardwired smoke and Carbon Monoxide alarms shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for hardwiring with out the removal of interior finishes.
 - a) This exception shall be approved by local AHJ and SC Housing authority inspectors only.
 - b) Battery powered Smoke and Carbon Monoxide alarms shall be interconnected with a ten (10) year battery.

8. Dwelling Habitable Rooms.

- a. The dwelling unit must provide adequate space for the family.
- b. The dwelling unit must have a living room, a kitchen and a bathroom.
- c. The dwelling unit must have at least one sleeping area (bedroom or living/sleeping room) for every two persons.
 - i. No basement shall be used as a habitable room or housing unit unless: the floors and walls are impervious to leakage of underground and surface runoff water and insulated against dampness and condensation and there is at least one means of egress that meets building exit standards.
 - ii. No attic shall be considered a habitable area.
 - iii. No cellar shall be considered a habitable area.

9. Human Hygiene.

- a. All plumbing fixtures must be connected to an approved potable water source.
- b. All plumbing fixtures must have hot and cold running water, toilet cold water only.
- c. All plumbing fixtures must be connected to an approved sewage disposal system.
- d. There shall be a water heater of adequate size and in proper operating condition capable of supplying water at a temperature of not less than one hundred twenty (120) degrees Fahrenheit.

10. Sanitary Facilities, Bathroom.

- a. Must be in proper operating condition and adequate for personal cleanliness and disposal of human waste.
- b. The bathroom shall be located within the dwelling.
- c. The bathroom shall be located in a separate room.
- d. The bathroom shall have a door with privacy lock.
- e. The bathroom must include the following fixtures in proper operating condition, no fixtures shall be leaking, cracked, broken or badly chipped.
 - i. Toilet
 - ii. Fixed sink basin, lavatory
 - iii. Shower or tub/shower
- f. There shall be adequate ceiling or wall lighting in the bathroom.
- g. The bathroom must have one (1) GFCI receptacle in proper operating condition.
- h. The bathroom shall have an exhaust fan or operable window for ventilation.

11. Food Preparation, Kitchen.

- a. The dwelling must have suitable space and equipment to store, prepare, and serve food in a sanitary manner.
- b. The kitchen shall be located within the dwelling.
- c. There shall be a kitchen sink in proper operating condition.
- d. There shall be three (3) linear feet of counter top for food preparation next to the sink per single occupancy. Add one (1) linear foot per each additional occupant of the dwelling.
- e. There shall be an oven and stove top or range in proper operating condition.
- f. The stove top or range shall have a range hood or over the range microwave with vent in proper operating condition.
- g. There shall be a full-sized refrigerator with freezer. Counter top or under counter type refrigerators are not acceptable. The refrigerator must be capable of maintaining a temperature low enough to keep food from spoiling.
- h. There shall be adequate ceiling lighting in the kitchen.
- i. The kitchen must have at least one electrical outlet in proper operating condition. This outlet must be GFCI if located within 6' of a water supply.

12. Dwelling Exterior Surfaces.

- a. **Exterior wall surfaces.**
 - i. All exterior wood surfaces shall be protected with paint or other approved protective covering to prevent deterioration and the entrance or penetration of moisture.
 - ii. The exterior wall surface must not have any serious defects such as leaning, buckling, sagging, holes, or defects that may result in air or water infiltration or vermin or rodent infestation.

- iii. There shall be proper flashing at walls, roofs, chimneys, windows, doors or any other wall penetration. For hidden/non-visible flashing, the presence of no damage assumes proper flashing.

13. Dwelling Interior Surfaces

a. Interior floor Surfaces.

- i. Flooring shall be in sound condition, shall be free of serious defects, in good repair and shall be safe to use.
- ii. After removal of any non-affixed treatment or object including all furniture, flooring shall be reasonably smooth, not rotten or worn through, and without visible or excessive cracks/deterioration which permit air and or rodents to penetrate rooms.
- iii. Floors shall be reasonably level. There shall be no change in height greater than ¼” on the flooring surface.
- iv. All bathroom, toilet room, laundry and kitchen floors shall be constructed reasonably impervious to water so as to permit such floor to be readily kept in a clean and sanitary condition.

b. Interior wall surfaces.

- i. Walls shall be in sound condition, shall be free of serious defects, not seriously out of level and structurally sound.
- ii. After removal of any non-affixed treatment or object including all furniture, there shall be no holes, visible loose plaster, sheetrock, boards or other loose wall materials susceptible to falling.
- iii. The walls shall be substantially vermin and rodent proof.

c. Ceiling Surfaces.

- i. Ceilings shall be in sound condition, shall be free of serious defects, not seriously out of level and structurally sound.
- ii. After removal of any non-affixed treatment(s) or object(s), there shall be no holes, visible loose plaster, sheetrock, boards or other ceiling finish susceptible to falling.
- iii. The ceilings shall be substantially vermin and rodent proof.

14. Dwelling Doors.

a. Exterior doors.

- i. Exterior doors shall be in sound working order, shall be free of serious defects, not out of level and in good repair.
- ii. Exterior doors shall be substantially weather-tight and rodent proof with no visible light at the header, jambs or threshold.

iii. Exterior doors shall be lockable from the inside and outside. Double cylinder dead bolts are prohibited.

b. **Interior doors.**

i. Interior doors shall be in sound working order, shall be free of serious defects, not out of level and in good repair.

ii. Interior doors shall be provided at all bedrooms and bathrooms with privacy locks.

iii. Interior doors shall be provided at all doorways as designed and or intended.

15. Dwelling Windows.

a. Every habitable room in a dwelling or dwelling unit shall contain a window or windows facing outside.

b. Each living room must have at least one operable window in proper working order.

c. Each sleeping room must have at least one operable window in proper working order.

d. Window frames shall not be visibly rotten, termite damaged, fire damaged, warped or broken.

e. All windows shall be substantially weather tight and rodent proof with no visible light at the styles, rails.

f. Window glass shall not be missing, cracked or broken.

g. All operable windows shall be provided with suitable hardware to include operable locks and shall be made to open freely.

h. All operable and openable windows shall be adequately screened.

i. Screens shall not be permanently fixed to the window frame or sash.

ii. The screens on windows may be omitted for dwelling units containing a permanently installed heating and air conditioning system providing the dwelling unit with year-round mechanical ventilation.

D. BUILDING MECHANICAL, ELECTRICAL AND PLUMBING SYSTEM STANDARDS

General. Each dwelling unit's domestic water, electrical system, HVAC, and sanitary system must be free of health and safety hazards, functionally adequate, and operable. Any electrical, plumbing, heating or other utilities furnished to an accessory structure shall be free of health and safety hazards.

Major MEP Building Systems (e.g. Heating and Cooling Equipment, Ventilation, Electrical and Plumbing) must have a remaining useful life of a minimum of ten (10) years.

1. Heating and Cooling (HVAC) Equipment.

- a. The dwelling unit HVAC must be able to provide a thermal environment that is healthy for the human body.
- b. There must be a safe and properly operating HVAC system including all ductwork, controls, return/delivery grills, etc. that shall be properly installed and capable of safely and adequately providing heat and air conditioning to each and every room of the dwelling to a heating temperature of at least sixty-eight (68) degrees Fahrenheit with an outside temperature of twenty (20) degrees Fahrenheit.
- c. All gas and oil burning equipment existing on the premises shall be of a type approved and installed in accordance with the provisions of the South Carolina State Building Code and any other applicable codes.
- d. The dwelling unit must not contain unvented room heaters or other non- sealed combustion equipment.
 - i. Existing wood-burning open fireplaces which are for supplemental heating only are exempt from this requirement but any combustion equipment installed in an open fireplace is not exempt.
- e. Fireplace(s) shall be used only for supplemental heat and not for primary heating, and shall have no loose mortar or damaged firebrick.

2. Ventilation.

- a. There must be adequate air circulation in the dwelling unit.
- b. The home must have at least one exhaust fan in the bathroom or kitchen vented to the outside for every 1800 SF.
 - i. The mechanical exhaust fan must be rated to exhaust 80 CFM minimum and capable of exhausting at a rate of 50 CFM minimum.
- c. Bathroom(s) shall have an exhaust fan or operable window for ventilation.
- d. Clothes dryers shall be exhausted in accordance with South Carolina Building Code and the manufacturer's instructions.
 - i. Dryer exhaust systems shall be independent of all other systems and shall convey the moisture and any products of combustion to the outside of the building.
- e. All ventilation/exhaust ducts shall terminate at or beyond the exterior skin of the building.
- f. Exhaust air cannot be delivered to/terminated in the attic, crawl space, enclosed/ screened porch or other semi- enclosed space.
- g. Attics shall be properly ventilated.

3. Outside Air/ Fresh Air

- a. A filtered and protected passive or mechanical fresh air intake system is required if the home or occupants meet any of the following criteria:
 - i. Home occupant has a respiratory illness.
 - ii. Known presents of indoor contaminants such as Lead, Asbestos, Radon, Carbon Monoxide, Mold or Cigarette Smoke.

- iii. An open fireplace is present.
- iv. Inoperable or no windows in any habitable room.
- b. Exhaust Fan is one that is rated to exhaust 80 CFM minimum and capable of exhausting at a rate of 50 CFM minimum. Additionally, the fan shall be capable of continuous, quiet (by homeowner preference) operation in conjunction with either a passive or mechanical filtered air intake system to provide fresh air. Existing fans in a home meeting these criteria are acceptable
- c. Fresh air mechanical and gravity outdoor air intake openings shall be located:
 - i. Not less than ten (10) feet horizontally from any hazardous or noxious contaminant source, such as vents, chimneys, plumbing vents, sanitary sewer vent, streets, alleys, parking lots and loading docks, except as specified in the current SC Residential Codes.
 - ii. Not less than three (3) feet below contaminant sources where such sources are allowed by the SC Residential Code to be located within 10 feet of the opening.
 - iii. Intake openings on structures in flood hazard areas shall be at or above the 100-year flood plain.
 - iv. No intake air can be sourced from the attic, crawl, enclosed/screened porch or other semi-enclosed space.
- d. Filters washable or throwaway for passive fresh air intake shall be designed to keep insects, pollens and dust mites out of the home but allow maximum infiltration (this is equivalent to a MERV rating of 3-4).
- e. Protection. Fresh air intake openings in louvers, grills and screens shall not be smaller than ¼” or larger than ½” in any direction.

4. Electrical Service, Panel and Supply.

- a. Electrical Service shall be 150 amp minimum with a Panel Box with a main breaker and a minimum of ten (10) circuit breaker protected circuits.
- b. Screw-in plug fuse panel boxes are unacceptable and must be replaced.
- c. Circuit breakers, fuses and branch circuits (wire) shall be properly sized and installed.
- d. Knob and tube wiring is unacceptable and must be replaced.
- e. Overloaded circuits are unacceptable and must be repaired/replaced.
- f. Wiring shall be free from hazards, damaged and properly protected.
- g. The dwelling unit shall be safely wired for existing or required lighting, receptacles, central heating and cooling equipment, major appliances/equipment, water well pumps and septic systems when applicable.
- h. There shall be no flexible cords (extension cords) used as a substitute for the fixed wiring of a structure, nor run through holes in walls, ceiling or floors; through doorways, windows or similar openings; attached to building surfaces, or concealed behind building walls, ceilings or floors.

5. Electrical

- a. All electric wiring, devices, appliances and fixtures shall be installed in accordance with the South Carolina State Building Code and none shall be dangerous or hazardous.
- b. The housing must have no evidence of electrical hazards.
- c. Electrical fixtures and wiring must not pose a fire hazard.
- d. The dwelling unit must have sufficient electrical sources so occupants can use essential electrical appliances.
- e. The living room and each sleeping space must have at least two electrical outlets in proper operating condition.
- f. There shall be no hanging light fixtures or outlets from electric wiring,
- g. There shall be no broken or cracked switches or outlets.
- h. There shall be no missing or broken missing cover plates.
- i. There shall be no missing or broken panel box, disconnect or fuse box covers.

6. Lighting Fixtures

- a. At least one (1) fixed in place ceiling or wall type electric light fixture shall be provided in every hall, stairway, bedroom, laundry room, furnace room, basement or any other area in which artificial light is required for the safety and welfare of the occupants.
 - i. A switched wall receptacle shall be acceptable in a bedroom, living room or den.
- b. There shall be exterior lighting at all entrances/exits.
- c. There shall be lighting at all equipment in crawl spaces, basements and attics; switched keyless fixtures are acceptable.
- d. Light fixtures must be permanently mounted and in proper operating condition.

7. Plumbing

- a. All water piping shall be properly supported with no broken or leaking lines.
- b. All water piping shall be protected from freezing by approved methods.
- c. The kitchen sink, tub/shower, toilet, washing machine box and basin/lavatory must have a proper sewer trap and drain,
- d. Sewer drains must not be clogged and the toilet must flush properly.
- e. All existing and necessary plumbing vents shall be properly sized and functioning to prevent the escape of sewer gases or severe leakage of water.
- f. All sewer and water lines shall be properly supported with no broken or leaking lines.
- g. All plumbing fixtures shall be in proper working condition with no leaks existing.

E. ENERGY EFFICIENCY STANDARDS

1. **AirTightness.** The dwelling unit shall be weatherproof and capable of being adequately heated and cooled.
 - a. **Floors.** After removal of any non-affixed treatment or object including all furniture, floors shall be without visible holes or excessive cracks which permit air to penetrate the dwelling unit.
 - b. **Interior Walls.** After removal of any non-affixed treatment or object from interior walls including all furniture, there shall be no visible holes, loose plaster, visible cracks that would permit air to penetrate the dwelling unit.
 - c. **Attics/Ceilings.** After removal of any non-affixed treatment(s) or object(s), there shall be no visible holes, loose plaster, boards, sheetrock or other ceiling finish susceptible to air infiltration.
 - i. Existing insulation, light/fan fixtures, cover plates, HVAC grills/panels, cabinets, plumbing fixtures are all considered affixed.
 - d. **Exterior wall.** All exterior wall surfaces shall be waterproof, weatherproof and rodent proof with no visible holes, cracks or rotted boards.
 - e. **Foundation.** The foundation shall be waterproof, weatherproof and rodent proof with no visible holes, cracks.
 - f. **Doors.** Exterior doors shall be substantially weather-tight with no visible light at the header, jambs or threshold.
 - g. **Windows.** All windows shall be substantially weather tight with no visible light at the styles, rails, frames and glass shall not be broken.
2. **Insulation.** R-30 minimum insulation shall be installed in attics/ ceilings to the insulation manufacturer's specifications with no gaps, voids, compression or wind intrusion.
 - a. Attic access or stairs shall be air tight with insulation or tent over the opening.
3. **Crawlspaces.** All crawlspace areas with 18" or more clearance from the bottom of the wood structural floor and/or with 12" or more clearance from the bottom of wood girders shall have one hundred (100%) percent ground cover of 6 mil thickness or greater.