

# Berkeley County HOME Property Standards



**GRANTS ADMINISTRATION**

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## General Requirements

1. No work can begin until a written agreement is executed and the NEPA Environmental Review is completed.
2. All work funded by Berkeley County (the County) HOME funds must meet or exceed current South Carolina Building Code standards, and all local permitting and inspection requirements.
3. Luxury repairs, installations, and/or replacements are prohibited.
4. No unlicensed person shall work on any project funded by the County HOME funds.

## Application Plan Requirements

1. Plans for each site, home and/or building are to be submitted with the application and must be full size (24"x36") electronic (PDF) versions uploaded to the County's website.
2. Each home/building/development must have a home/building plan name clearly identified on the plan; Lot 1, Lot 2, etc. is NOT acceptable, the "Townsend," "Carson," etc. are acceptable.
3. Architectural plans must include:
  - a. Front, rear and side elevations of all building types that provides actual soil elevations not typical and identifies all materials to be used on building (s) exterior using a scale of 1/8" = 1'.
  - b. Building plans using a scale of 1/8" or 1/4" = 1'
  - c. Building plans to include total square footage and heated total square footage.
  - d. Dimensioned floor plans for all unit types using a scale of 1/4" = 1" that include heated square footage, total square footage, individual Primary Bedroom, Bedroom(s), Living Room, Dining Room, Kitchen, Balcony, Sunroom, Patio, Porch, and Deck square footage. Plan is to include furniture and equipment layout.
  - e. Plans are to be redlined for projects involving renovation and/or demolition of existing structures, proposed changes to building components and design and also describe removal and new construction methods.
  - f. For projects involving removal of asbestos and/or lead based paint removal, general notes identifying location and procedures for removal.

## Inspection Standards

### Inspection Process

1. Berkeley County schedules inspections in the most efficient and timely manner possible.
2. Inspectors will do their best to make appointments that satisfy all individuals involved.
3. Ongoing "special requests" will not be honored.
4. Inspections will be completed in accordance with the Berkeley County Building Department's standard procedure and the draw schedule outlined in the executed

agreement.

## Contractor Standards

### License Requirements

1. All contractors and subcontractors must have an appropriate and necessary trade license(s) and be licensed by the SC Dept. of Labor Licensing and Regulation and/or DHEC for the scope of work they are assigned to complete for the HOME project.

### Contractor Insurance Requirements

SCHEDULE	LIMITS
Worker's Compensation	South Carolina Statutory Coverage
Commercial General Liability	\$1,000,000 Combined
Professional Liability/Malpractice	\$2,000,000 Each Occurrence
Automobile Liability	Limits below
Builder's Risk	Equal to 100% of Completed Project Value

The Contractor's insurance shall cover the Contractor, its employees, and its subcontractors of any tier to the extent its subcontractors of any tier are not otherwise insured.

Commercial General Liability \$1,000,000 Combined Single Bodily injury/Property Damage

This coverage should include, but not limited to:

- a. Coverage for the liability assumed by the contractor under the indemnity provision of the contract.
- b. Coverage for the Premises/Operations
- c. Personal and Advertising Injury Liability
- d. Products/Completed Operations
- e. Broad Form Contractual Liability

Covering all owned, hired, and non-owned automobile equipment, and other vehicles used by the successful bidder in the performance of the work with the following limits of liability:

Combined single bodily injury/property damage	\$1,000,000
Professional Liability/ (Errors & Omissions)	\$2,000,000 Each Occurrence

Malpractice: this coverage should include, but not limited to:

Berkeley County  
HOME Property Standards



## Development Design Criteria

Contractors must submit full size (24" x 36") plans and specifications in electronic (PDF) versions via email and receive approval before commencing site work or construction. At all times after project award, the Contractor is responsible for promptly informing Santee Lynches Council of Governments of any change(s) or alteration(s) which deviate from the final plans and specifications approved by Berkeley County. This includes changes required by local governments to receive building permits.

Nothing in this document herein shall be construed to modify or eliminate any legally imposed requirement, including those governing accessibility.

### 1. Design Document Standards

#### A. Code Compliance

Construction must be in compliance with:

1. 2021 International Residential Code with South Carolina Building Code Council Modifications (SCBCCM) or currently adopted code year.
2. 2021 International Building Code with SCBCCM or currently adopted code year.
3. 2021 International Mechanical Code with SCBCCM or currently adopted code year.
4. 2021 International Plumbing Code with SCBCCM or currently adopted code year.
5. 2021 International Fuel Gas Code with SCBCCM or currently adopted code year.
6. 2020 International Electrical Code with SCBCCM or currently adopted code year.
7. 2021 International Fire Code with SCBCCM or currently adopted code year.
8. 2009 International Energy Conservation Code with SCBCCM or currently adopted code year.
9. 2020 National electric code with SCBCCM or currently adopted code year. 2012 NFPA 101 Life Safety Code.
10. ANSI 117.1 – 2017 Edition.
11. Americans with Disability Act.
12. Fair Housing Act.
13. Section 504
14. HUD Housing Quality Standards (HQS)
15. HUD Minimum Property Standards (MPS)
16. HUD Uniform Physical Condition Standards (UPCS).

These code standards are not meant to replace Federal, State, or local codes.

#### B. Plan Requirements

1. Each home/building/development must have a home/building plan name clearly identified on the plan.

2. All new construction developments and additions or new buildings added in rehabilitation projects must submit a complete site-specific soils report and boring site plan with laboratory test results, not more than six months old at the time of application and not more than one year old with final plans.
3. Site & Civil plans, four pages minimum, using a scale of 1" = 30' or 40' with a north arrow that include:
  - a. Full parcel survey; must include complete adjoining parcel ('s) if functionally dependent.
  - b. Phased site plan.
  - c. Vicinity map.
  - d. Street name(s) where site access is made.
  - e. Site acreage with Tax map #'s.
  - f. Adjacent properties with descriptions Tax map #'s
  - g. Flood plains and wetlands.
  - h. Site zoning restriction including setback, utility easements, ingress/egress easements, right of ways and boundary lines.
  - i. Location of any proposed/new utility easements, ingress/egress easements and right of ways.
  - j. Existing topographic elevations and proposed elevations with maximum two (2) foot elevation increments. Grade lines must be clear and numerically labeled/ marked.
  - k. Location of existing and any proposed changes to existing structures, buildings, roadways, and parking areas.
  - l. Finished floor elevations for all buildings.
  - m. Building(s) layout with locations of proposed specialty units including but not limited to handicapped and sensory impaired locations.
  - n. Site features such as community building, playground, picnic shelter, gazebo, walking trails, refuse collection area, postal facilities, and site entrance signage.
  - o. Planed roads and parking areas with parking spaces clearly depicted.
  - p. Development site lighting plan.
  - q. Retaining walls.
  - r. Planed landscaping.
  - s. Underground utilities; sanitary sewer, water, gas, electric, cable, internet, and telephone
  - t. Storm water detention; detention pond, underground detention, storm water/detention easement.
  - u. Fencing, all proposed fencing on site.
4. Architectural plans that include:
  - a. Front, rear and side elevations of all building types that provides actual soil elevations not typical and identifies all materials to be used on building (s) exterior using a scale of 1/8" = 1'.
  - b. Building plans using a scale of 1/8" or 1/4" = 1'

- c. Building plans to include total square footage and heated total square footage.
- d. Engineered Structural and MEP plans.
- e. Dimensioned floor plans for all unit types using a scale of ¼" = 1" that include heated square footage, total square footage, individual Primary Bedroom, Bedroom(s), Living Room, Dining Room, Kitchen, Balcony, Sunroom, Patio, Porch, and Deck square footage. Plan is to include furniture and equipment layout.
- f. Plans are to be redlined for projects involving renovation and/or demolition of existing structures, proposed changes to building components and design and also describe removal and new construction methods.
- g. For projects involving removal of asbestos and/or lead based paint removal, general notes identifying location and procedures for removal.

## 2. Mandatory Design Criteria

### A. Accessibility

Developments must provide maximum accessibility and shortest possible routes, meet all federal, state, and local accessibility standards.

#### *Required Accessibility Standards:*

##### **Applies to projects with five (5) or more HOME-assisted units.**

1. **Mobility Disabled Units:** Shall be Type A, at least 5% of the total units (but no less than one unit) must be equipped for the mobility disabled, including for wheelchair restricted residents. ADA/ANSI compliant 36" x 60" minimum useable floor space roll-in showers must be incorporated into all of the Type A mobility equipped units. Mobility units with more than one bathroom must provide the primary bedroom bathroom with the roll-in shower.
2. **Hearing and Sight-Impaired Units:** Shall be Type B in multifamily buildings and new developments; Shall be Standard units in infill housing, at least an additional 2% of the total units (but no less than one unit) must be equipped for hearing and sight-impaired residents including compliance with ICC/ANSI A117.1- 2017 Section 1106, which includes audio and visual notification on fire alarms and at the primary unit entrance.
  - a. The unit(s) must be roughed in to allow for strobe lights in all smoke alarms.
  - b. The units must have a receptacle next to telephone jacks in units for future installation of TTY devices.
  - c. A hardwired lighted doorbell button connected to an audible and strobe notification device installed in each unit is required for each sight and hearing-impaired unit, per ANSI 117.1-2017 Section 1106.5. Where doorbell signal device is located in a sleeping area, controls shall be provided to deactivate the signal.
  - d. **5% and 2% requirement:** The same unit(s) cannot be used to satisfy the 5% and 2% requirement.

- e. Signage for designated common areas and all units must be in Braille and meet ANSI A117.1, Section 703 standards.

**Older Persons 55+ Developments:**

- 1. All older persons (55+ years) and elderly developments will be one-story structures, or if greater than one story, all stories will be accessible by an ADA compliant elevator (s).
- 2. **Elevators:** There must be an ADA compliant elevator to all units above the ground floor.
- 3. **Furnished Gathering Areas:** Buildings with multi-story construction must have interior conditioned and furnished gathering areas located throughout the complex, including but not limited to areas near elevators.
- 4. **Accessible and Adaptable:** 100% of the units must be accessible and adaptable (Type B), as defined by the Fair Housing Amendments Act of 1988. *For rehabilitation projects refer to the Fair Housing Amendment Act of March 13, 1991.*
- 5. Hallways and Corridors areas must have a minimum width of 42 inches. *Does not apply to rehabilitation projects.*
- 6. Corridors in any common areas must have a continuous suitable handrail on both sides mounted 34 to 38 inches above finished floor and be 1 ¼ inches in diameter.
- 7. Provide a minimum 18-inch grab bar in all tub/shower units. The grab bar must be installed centered vertically at 48 inches A.F.F. on the wall opposite the controls.
- 8. Provide solid blocking at all toilets and tub/shower units for grab bar installation.

**B. Unit Size & Base Requirements**

- 1. All residential units must meet minimum unit size requirements. The square footage measurements below are for heated square feet only, measured interior wall to interior wall, and do not include exterior wall square footage. The area occupied by the staircase may only be counted once. Unheated areas such as patios, decks, porches, stoops, or storage rooms cannot be included.

Studio	500 square feet
1 Bedroom	600 square feet
2 Bedroom	850 square feet
3 Bedroom	1,100 square feet
4 Bedroom	1,250 square feet

No more than 20% of the total number of residential units may be Studio units, unless supported by market study.

**The above square footage requirement does not apply to rehabilitation projects.**

- 2. Units must also meet the following requirements:
  - a. Studio: the bedroom, living area and full kitchen may be contained in the same room; must have one full bathroom and laundry room.

- b. One Bedroom: at least six rooms including a living room, dining room, full kitchen, one bedroom, one full bathroom and laundry room.
  - c. Two Bedroom: at least seven rooms including a living room, dining room, full kitchen, two bedrooms, one full bathroom and laundry room.
  - d. Three Bedroom: at least nine rooms including a living room, dining room, full kitchen, three bedrooms, two full bathrooms and laundry room.
  - e. Four Bedroom: at least ten rooms including a living room, dining room, full kitchen, four bedrooms, two full bathrooms and laundry room.
3. **Bedroom Size:** The primary bedroom in each unit must be at least 170 square feet. All other bedrooms must be a minimum 120 square feet. The minimum bedroom square footage excludes the closet space.  
*Does not apply to rehabilitation projects.*
4. **Living Room Size:** The living room must be at least 150 square feet with a minimum dimension of 11'6".  
*Does not apply to rehabilitation projects.*
5. **Bathroom Requirements:**
- a. Full Bathroom: must contain a toilet, vanity with sink and a 32" x 60" one piece fiberglass tub/shower combination.
  - b. Half Bathroom: must contain a toilet and a vanity with sink.
  - c. ADA/ SECTION 504 UNITS: Type A, any unit that is required to meet ADA/ Section 504 accessibility requirements shall have the accessible primary bedroom and bathroom with one roll-in shower located on the accessible floor.
  - d. Town Homes without a bed and bath on the main floor will be required to have a half bathroom located on the main floor. Does not apply to rehabilitation projects unless it's a gut rehab including plumbing.
  - e. Whirlpool tubs are prohibited.
6. All High-Rise multifamily units must have: a balcony, sunroom, or patio.
- a. A covered / roofed main entryway that must be a minimum of 5'x5' and,
  - b. A patio, deck, or balcony that must be 70 square feet minimum or,
  - c. A sunroom that must be 70 square feet minimum and:
  - d. Contain a minimum of three operable window units.
  - e. Have distinct architectural separation from the living room.
  - f. Applicants may request a wavier for this requirement before the submission deadline if building zoning or design restrictions prohibit.  
*Does not apply to rehabilitation projects.*
7. All Single Family, Townhouse and Duplex Developments must have:
- a. a covered / roofed front main entryway that must be a minimum 5'x5' and
  - b. a porch, patio, or deck at a minimum of 70 square feet.
  - c. A front porch on a single-family home or stacked duplex is acceptable to meet this requirement and must be 100 square feet minimum.
8. Hallways, interior:
- a. 40" minimum width in all family units.
  - b. 42" minimum width in all older person's units.

*Does not apply to rehabilitation projects.*

9. **Breezeways and Stairways:** 40" minimum clear path of travel is required through building breezeways and public/ common use stairways. *Does not apply to rehabilitation projects although all current egress and accessibility codes and regulation must be met.*
10. Moisture resistant gypsum board must be installed on all ceilings and walls of bathrooms, on all walls of laundry rooms, mechanical closets, and exterior storage closets, and behind kitchen sink base and dishwasher.
11. Water-resistant gypsum board or equivalent shall be provided behind any tub/shower unit located on an exterior wall.
12. Fireplaces are prohibited in residential units.
13. Swimming pools are prohibited.

### C. Community Room(s), Site Amenities & Facilities

Projects with 20 or more units may elect to include an office, maintenance room and/or community room. Costs to construct the office and/or community room are eligible; however, the costs to furnish these spaces are not eligible.

Community room(s) and amenities must be consistent with the design and appearance of the residential buildings. Development lighting is required for all amenities. Amenities must be available 24/7 and include occupancy sensor lighting or photocell lighting if an exterior amenity.

1. Community room(s) and site amenities may be incorporated into the resident/ unit buildings therefore eliminating the need for a community building. If a community building is provided, it must be at least 1,200 square feet and include the community multi-purpose room and ADA compliant handicapped toilet facilities. The community building may include a leasing office of 200 square feet minimum, laundry rooms, and storage/ maintenance rooms of 200 square feet minimum. Screened porch(es), sunroom(s), and covered patio(s) may be incorporated into the community building, but their square footage will not be included as part of the 1,200 square foot minimum for the community building. All primary entrance doors in the community building and site amenities must be either half lite or full view glass, unless otherwise noted, to allow residents a view of the outside/inside. This does not include the maintenance or storage room doors. Blinds are prohibited on these doors.  
*Does not apply to rehabilitation projects.*
2. **Family developments may elect one or more of the following amenities:**
  - a. Community multi-purpose room must contain a minimum of 8 square feet for each unit, rounded up, never being less than 250 square feet regardless of developments total units. Does not apply to rehabilitation projects.
  - b. Kitchenette with a minimum of 6 linear feet of countertop that is equipped with refrigerator, microwave, sink and a 5lb. fire extinguisher. Does not apply to rehabilitation projects.
  - c. An exercise rooms. Does not apply to rehabilitation projects.

d. Tenant computer room. Computers must be connected to a high-speed internet service. All equipment must be kept current for the entire compliance period. All expenses associated with supplies, updates, internet service and replacement of the computer equipment is the responsibility of the development.  
*Does not apply to rehabilitation projects.*

**3. Older Person 55+ developments may elect one or more of the following amenities:**

- a. Community multi-purpose room must contain a minimum of 6 square feet for each unit, rounded up, never being less than 250 square feet regardless of developments total units. Does not apply to rehabilitation projects.
- b. Kitchenette with a minimum of 6 linear feet of countertop that is equipped with refrigerator, microwave, sink and a 5lb. fire extinguisher. Does not apply to rehabilitation projects.
- c. An exercise rooms. Does not apply to rehabilitation projects.
- d. Tenant computer room. Computers must be connected to a high-speed internet service. All equipment must be kept current for the entire compliance period. All expenses associated with supplies, updates, internet service and replacement of the computer equipment is the responsibility of the development. Does not apply to rehabilitation projects.

**4. Laundry Facilities:**

- a. Laundry facilities are required for all developments not providing washers and dryers in all rental units.
- b. Entry into the laundry facility must be available at all times and days.
- c. The development must provide completed ready for use washer and dryer hookups and space for the number of commercial grade washers and dryers required per development based upon the total units in the development as follows:

0-15 units	2 Washers and 2 Dryers
15-30 units	3 Washers and 3 Dryers
30 -60 units	6 Washers and 6 Dryers
61-100 units	8 Washers and 8 Dryers
101-150 units	10 Washers and 10 Dryers
151-250 units	12 Washers and 12 Dryers
250+ units	15 Washers and 15 Dryers

The development must supply at all times a minimum one washer and one dryer. In addition, the development will supply the number of washer and dryers needed to meet tenant needs and usage.

- d. The entrance must have a minimum roof covering of 20 square feet and have adequate lighting functioning from dusk to dawn.
- e. The primary entrance door to the laundry facilities must be full view/ full length glass to allow residents a view of the outside/inside. Blinds are prohibited.
- f. Contain adequate seating.
- g. A working surface for folding clothes must be installed and provide.
- h. 24" x 48", 8 square feet minimum

- i. Must provide working space of 8 square feet per every twelve washer/dryers provided.
  - j. One of every twelve washer/dryers provided must be ADA compliant and accessible with one working surface also being ADA compliant and accessible.
5. **Postal Facilities:**
- a. If not located within the building, the postal facility must:
    - i. have a roof covering which offers residents ample protection from the rain while gathering mail.
    - ii. be located adjacent to available handicap and standard parking and sited such that tenants will not obstruct traffic while collecting mail; and
    - iii. have adequate lighting functioning from dusk to dawn.
  - b. Single Family scattered site developments must provide a mailbox on a pedestal/post that will be consistent with the design and appearance of the residential home and area.
6. **Office and Maintenance Room:**  
**Does not apply to single family scattered site developments.**
- a. Development must have an office on site of 200 square feet minimum.
  - b. Development must have a maintenance room of 200 square feet minimum.
  - c. The office must contain ADA compliant toilet facilities.
  - d. Office must be clearly marked and visible with exterior signage on or close to building.
7. **Parking, Roads, Sidewalks & Development Sign:**
- a. Parking and sidewalk lighting must be provided.
  - b. All roads and parking areas are to be asphalt or concrete paved.
  - c. Curbing is required for all roads and parking areas throughout the development site.
  - d. Parking areas must be located on the development site.
  - e. Development sign at all property entrances designed with brick or stone columns with lighting to be consistent with the design and appearance of the residential buildings. Affixed with a Fair Housing logo. Does not apply to single family scattered sites.
  - f. All sidewalks, crosswalks and walkways shall be a minimum of 48" in width, must be made of concrete, and must comply with the following requirements:
    - i. Provide access to all parking spaces, front entryway doors, amenities, driveways, and leasing office.
    - ii. Sidewalks may not exceed a 2% cross slope regardless of where located. Provide a non-skid finish to all walkways.
    - iii. Switchbacks are not permitted from handicap parking spaces or access aisles to building entrance in new construction projects.
    - iv. Be accessible and compliant as required within the development with clearly marked ramps, crosswalks, signage, etc. in accordance with all accessibility regulations.
    - v. The developments sidewalks must join the local existing sidewalks if they exist.

## 8. **Parking Spaces**

Developments must provide adequate parking spaces as outlined below. If local guidelines mandate parking less than the requirement, the development must receive approval prior to application submittal. If local guidelines mandate more parking than these requirements, the development must follow those mandates:

- a. All developments require a minimum number of parking spaces per unit size as follows:
  - i. One-bedroom units are 1.0 parking spaces per unit.
  - ii. Two-bedroom units are 1.5 parking spaces per unit.
  - iii. Three- and four-bedroom units are 2.0 parking spaces per unit.
- b. There must be at least one handicap parking space for each designated accessible unit, and each development amenity such as the community room, postal facilities or refuse collection as required that must be the nearest available parking space to the unit and or the amenity.
  - i. All handicap parking spaces, and associated aisles must be concrete.
  - ii. Handicap ramps may not protrude into parking lot.
  - iii. Access aisles cannot be installed through vehicular paths of travel.
- c. All non-handicap parking spaces must be an asphalt or concrete solid surface with a minimum dimension of 8 feet wide and 18 feet deep. Compact parking spaces may be included in addition to those required to meet Agency requirements but will not count towards the minimum required in (a.) (i.) (ii.) (iii.) above.
- d. If tenants are required to pay for parking, those charges must be included in the rental fees and are subject to allowable rent limitations.
- e. Existing properties being submitted for acquisition or rehabilitation are not required to increase existing parking as stated in (a.) (i.) (ii.) (iii.) above.

## 9. **Refuse Collection Area (s) & Recycling**

- a. Collection area(s) should not be placed at the entrance or exits of the development unless the collection area provides the following:
  - i. A pull off from the main road consisting of a cul-de-sac / turn around.
  - ii. Dumpster drop off or pick up that does not stop or impede the flow of traffic.
  - iii. Tenant use that does not stop or impede the flow of traffic.
- b. Provide an easily accessible area that serves the entire development for the refuse collection area and recycling area. These can be combined into one area.
- c. Dumpsters / trash compactors and recycling area must be ADA accessible and located on an ADA accessible route with ADA parking near the collection area(s).
- d. Provide a collection and storage area of non-hazardous material for recycling.
  - i. Property management is responsible for prominently displaying a sign stating exactly which materials are and are not accepted for recycling.
  - ii. Property management is responsible for ensuring that these recyclables are actually recycled.
- e. The pad and approach pad to the dumpster must be concrete. The approach pad must be 12" thick minimum. At a minimum, the dumpster pad must include two

- painted pipe bollards installed behind each dumpster.
- f. Pedestrian paths of accessible travel must be marked/identified (painted in yellow or white) on dumpster pad surfaces.
  - g. The dumpster/ trash compactor and recycling pad/ area must be enclosed on at least three sides with materials that will be consistent with the design and appearance of the residential buildings. An enclosure combining masonry, cementitious products or composite products are acceptable enclosures or these products can be used independently. PVC or vinyl fencing is acceptable. Chain link and wood fencing are not acceptable.

#### D. Site and Site Lighting

1. Utilities (sanitary sewer, water, gas/electric, cable, internet, and telephone) are required to be underground throughout the development site. *Does not apply to rehabilitation projects.*
2. Lots must be graded so as to drain surface water away from foundation walls. The final grade away from foundation walls must fall a minimum of  $\geq 0.5$  inches per foot away from building for  $\geq 10$ ft. according to the National Water Management System Requirements under Energy Star Multifamily New Construction.
3. Provide positive drainage at all driveways, parking areas, ramps, walkways, and dumpster pads to prevent standing water.
4. Utilize yard drains if needed, piped to storm water system or to daylight.
5. No corrugated pipe.
6. All water from roof and gutter system must be discharged no less than 6 feet from building foundation. See gutter requirements.
7. All retention and/or detention ponds must be fenced. The storm water retention/detention basin design, maintenance and management shall be the sole responsibility of the owner/developer and shall be in strict accordance with all applicable federal, state, local and environmental regulations governing storm water retention/detention basins.
8. Site lighting is required for all parking, sidewalks, buildings, and site amenities and should be directed down to diminish nuisance light in residential units. Lighting plans to be completed using photometrics software reflecting an average maintained footcandle of 1.5 for all development parking, sidewalks, and exterior common areas.
9. No part of the disturbed site may be left uncovered or un-stabilized once construction is complete.
10. Burying construction waste on-site is prohibited.

#### E. Building Foundations, Slabs and Radon

1. Sites located in a Radon Zone-1 (highest level) will require Radon Resistant New Construction Practices. Rehabilitation projects must meet the Radon Mitigation Standards. The ANSI/AARST standards are available at <https://standards.aarst.org/>

- . Check applicable federal, state, and local building codes to see if more stringent codes apply.
- 2. All units and community buildings must be elevated 24" minimum above the base flood elevation. Base Flood Elevation - The elevation of an area in relation to the mean sea level expected to be reached during a flood. Based on historic data, these figures indicate which areas are most likely to be flooded. This includes all flood years (100, 500, and 1000 year) and both FEMA maps and Local flood hazard areas.
- 3. Slab constructed buildings/ structures. Slab to be elevated a minimum of 6" above finished grade on all elevations.
- 4. Slab foundations should be designed by a qualified design professional, who will determine the appropriate materials and height of the veneer above finished floor elevation on all elevations. Does not apply to rehabilitation projects.
- 5. Crawl space constructed home/structures will have a minimum of 30" clearance from the bottom of the lowest structural floor system framing member to grade. Does not apply to rehabilitation projects. Rehabilitation projects will be required to meet current code requirements with plans that demonstrate access to the entire crawl space.
- 6. Crawl space foundations should be designed by a qualified design professional, who will determine the appropriate materials and the height of the veneer installation relative to the finished floor elevation on all elevations.

## F. Building Exterior

The building exteriors should create a residential image appropriate to the market area. Building design must use different roof planes and contours to break up roof lines. Wide window and door trim should be used to accent siding. If horizontal banding is used between floor levels, use separate color tones for upper and lower levels. If possible, use horizontal and vertical siding applications to add detail to dormers, gables, and extended front facade areas.

All materials must be installed using standard construction methods and means, and result in the issuance of written manufacturer's warranty and guarantees. No exterior wood finishes may be used.

### **Exterior Wall Finishes**

The selection of exterior wall faces should be determined by a qualified design professional.

1. High quality durable low maintenance materials are required for exterior building coverings on all elevations including all exterior trims, fascia, soffits, ceilings, and vents and can consist of:
  - a. Brick must be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - b. Portland Cement Stucco (No EIFS) must be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - c. Stone- natural or manufactured must be installed per manufacturer's

- requirements to achieve at least a 30-year warranty.
- d. Fiber Cement Siding & Trims must be 5/16" thickness or greater and be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - e. Vinyl Siding must have a .044" thickness or greater and be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - f. Vinyl Soffit must have a .040" thickness or greater and be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - g. PVC or Vinyl Composite Trim Boards must be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - h. PVC Coated Trim Coil must have a .024" thickness or greater for fascia and freeze boards only- must be installed per manufacturer's requirements to achieve at least a 30-year warranty.
2. Where exterior brick does not extend to an eave line, aluminum flashing shall be installed that extends a minimum of 5" under/behind the above exterior wall surface material and over the outer edge of the brick to prevent water penetration.
  3. Weep holes must be below finished slab elevation and not covered by finished grade or landscaping.
  4. Siding applications require all exterior penetrations to be installed in plastic J-boxes.
  5. Metal z-flashings must be installed behind on top of and below all band boards and be of appropriate size for materials being flashed.
  6. Metal flashings must be installed behind on top of and below all veneer material changes.
  7. Metal flashing or 20 mil polyethylene when used in conjunction with a self-adhering polyethylene laminate flashing, must be installed above all exterior door and window units.

#### **Exterior Stairs, Railings, Columns & Signage**

1. Columns must be sized and loaded properly and consist of fiberglass, polyurethane wood, or aluminum. Must be installed with stand offs, bases, caps, and vents per manufacturer's recommendations. 4X4, 4X6, 6X6 etc. treated wood post wrapped with coil stock are prohibited. Steel post and treated post may be utilized if built up with cement trims.
2. Exterior steps at porches and patios and porches will be constructed of brick/stone foundation veneers with concrete deck/slab.
3. Multi story second, third, or fourth floor elevated porch or patio may be constructed utilizing concrete slabs or 5/4" composite materials for the deck. Be constructed in such a manner that no wood is exposed.
4. Concealment of wood shall be with composite materials such as PVC coated coil stock, vinyl 1x's composite 1x's, and fiber cement trims.
5. Handrails and/or guard rail systems used at steps, porches, and patios shall be code compliant systems made of composite materials such as vinyl, fiberglass, galvanized steel (field painted) or aluminum.
6. Public use stairway components, such as stringers, treads, and risers must be

- constructed from galvanized steel (field painted) and/or concrete. Handrails and pickets must be constructed from galvanized steel (field painted) or aluminum and be completely under roof cover.
7. Buildings and units must be identified using clearly visible signage and numbers. Building and unit identification signage must be well lit from dusk till dawn and meet ANSI A117.1, Section 703 standards.
  8. For Type A units,
    - a. ADA Handicap ramp components must be constructed from one of the following:
      - i. galvanized steel (field painted) and/or concrete.
      - ii. concrete slab with brick ribbon and sidewalls
      - iii. aluminum ramp system.
    - b. Handrails and pickets must be constructed from galvanized steel (field painted), wood, or aluminum.

## G. Roofing And Gutters

All roofing to be installed in accordance with the **current IBC/ IRC Chapter 9** and the standards listed below.

### **Asphalt Shingles**

1. Roof pitch to be a minimum of 4/12.
2. Architectural (dimensional) anti-fungal shingles must be used and:
  - a. Must be high quality and durable.
  - b. Must be installed per manufacturer's requirements to achieve at least a 30-year warranty.
  - c. The following shingle manufactures products must be used underlayment, leak barriers, starter strip shingles and hip & ridge cap shingles. No exceptions.
3. Synthetic underlayment is required and must be of the same brand as the shingle.
4. Leak barriers must be of the same brand as the shingles being installed and be the mineral surfaced type.
  - a. Leak barriers must be installed a minimum of 5" up all side walls.
  - b. Leak barrier must be installed a minimum of 24" around all roof penetration on the roof deck.
  - c. Ice barriers to be installed per IBC/IRC R905.1.2.
5. All flashing is to be installed per manufacturer's recommendations to obtain a minimum 30-year warranty and:
  - a. Step flashing to be 5"x5"x7" minimum.
  - b. Be a minimum of 0.019" (0.5 mm) in thickness.
  - c. Be factory painted.
  - d. Each shingle is to be step flashed. Continuous flashings are not acceptable.
  - e. Drip edge to be installed on all eaves and rakes per IBC/IRC R905.2.8.5 at a minimum.

## **Metal Roofing**

1. Roof pitch to be a minimum of 2/12
2. Standing Seam panels must be used and:
  - a. Be 24 gauge or thicker.
  - b. Have 1 ½" seam height minimum.
  - c. Have striations or stiffing ribs.
  - d. Have a galvalume coating.
  - e. Must have a 30-year minimum paint warranty.
  - f. Be installed per manufacturer's recommendations.
  - g. Must be installed by certified installers.
3. Synthetic underlayment is required on roof deck.

## **Low Slope Roofing 2% or ¼/12 pitch to 2/12 pitch (Flat roofing is prohibited)**

1. All low slope roofing products are to be installed per manufacturer's recommendations to achieve at least a 30-year warranty.
2. Products must be installed by certified installers.
3. Acceptable products are.
  - a. Metal panels with a 3" seam height minimum.
  - b. Single- Ply membranes
    - i. PVC or,
    - ii. TPO or,
    - iii. EPDM
  - c. Modified Bitumen must:
    - i. Be a 2-ply system.
    - ii. Be Torch down or liquid applied.
    - iii. Have a ceramic surface.
4. All Single Ply membranes and Modified Bitumen low slope roof products to be installed with heavy duty walkway pads:
  - a. Walkway must be a different color.
  - b. Must be from same manufacture as roofing material or approved by manufacture for use.

*For rehabilitation projects the roofing requirements above do not apply if the remaining useful life of the existing roof system is 15 plus years, the existing roof meets code requirements and was correctly installed.*

## **Gutters**

Seamless 6" minimum gutter and downspout systems are to be installed on all buildings.

1. Downspouts must be installed so as not to drain across pedestrian paths of travel.
2. All water from roof and gutter system must be discharged no less than 6 feet from building foundation by:
  - a. Concrete splash blocks with positive sloped drainage away from foundation; or
  - b. Be piped underground to an appropriate location.
3. All one- and two-story buildings must install a leaf guard system.

- a. No screen wire leaf guard systems allowed.

## H. Building Envelope, Insulation & Sound Proofing

1. All buildings must be wrapped with an exterior air and water infiltration barrier. All wall penetrations are to be taped for moisture protection.
2. Seal all penetrations to prevent moisture and air leakage.
3. All attics to be vented.
4. Framing must provide/ allow for complete building insulation.
5. Framing of roof and ceiling systems to allow the full depth of ceiling insulation to extend over the top plate of the exterior wall. Does not apply to rehabilitation projects.
6. Exterior walls R-15 insulation. Does not apply to rehabilitation projects unless the scope requires opening of the wall.
7. Attics R-38 insulation.
8. Crawl Space floors R-19 insulation.
9. Unit party walls and floor assemblies require sound proofing (sound batt insulation) to achieve a rating of STC 54.
10. Noise - All projects must have an interior noise level of no more the 45 decibels (db.) in prescriptive with the outside noise level. Plans must identify the STC ratings to achieve HUD's acceptable interior level of 45 decibels. Sites with Exterior noise levels of 75 decibels or higher are not eligible for funding.

## I. Windows And Doors

All windows and exterior doors must be Energy Star rated for zone south central be of high quality, durability and must be installed per manufacturer's requirements to achieve at least a 10-year warranty, 1 year warranty for Fire Rated doors. An accessible automatic door opener is required for the primary entrance into and out of older person's congregate buildings.

The project Architect is responsible and must confirm that the specified windows and doors including plan call out sizes meet all egress and accessibility requirements. Plans and or specifications that state or call out that being the responsibility of the contractor will be rejected.

1. All interior doors must:
  - a. Be side hinged.
  - b. Be hollow core paneled hardboard, paneled solid wood or hollow core flush hardwood doors.
  - c. Bedroom doors must be 3-0. Does not apply to rehabilitation projects.
  - d. Bath doors minimum of 2-8. Does not apply to rehabilitation projects.
  - e. Closet doors minimum of 2-6. Does not apply to rehabilitation projects.
  - f. Pantry doors minimum 2-0. Does not apply to rehabilitation projects.
  - g. Hollow core, flush lauan doors are prohibited.
  - h. ADA accessible doors at common areas and Type A units must:

- i. Have ADA lever hardware.
    - i. Be 3-0 minimum.
  - j. Have a 3/4" minimum air space at bottom of door measured from finished floor for air circulation.
  - k. Louvered doors at HVAC closet for air handler return are acceptable.
2. All exterior doors must be Energy Star metal-clad or fiberglass doors and must:
- a. Metal clad steel edge doors and frames are acceptable for use in firewalls only.
  - b. Provided door manufacturers data sheet (s) with plans.
  - c. Be side hinged.
  - d. Be a minimum of 3-0 in width (34" clear width). For rehabilitation projects 2-10 width doors shall be permitted and shall provide a clear width of not less than 32 inches where measured between the face of the door and the stop, with the door open 90 degrees if door is located in a masonry wall prohibiting increasing the door width.
  - e. Be paneled.
  - f. Have a rot proof jamb.
  - g. Include a peephole on main entry door.
  - h. Have a thumb latch/ lever style deadbolt lock.
  - i. ADA accessible doors at common areas and Type A units must:
    - i. Have a maximum threshold height of 1/2."
    - ii. Have ADA lever hardware.
    - iii. Include a peephole a maximum of 48" AFF at primary unit entry door only.
    - iv. Have spring hinges at the unit's primary unit entry door only.
  - j. Primary unit entry doors must have a minimum roof covering of 3'w x 5'd with corresponding porch/pad or be located in the breezeway.
  - k. Exterior full glass doors must:
    - i. Have blinds between the glass provided by the door manufacture.
  - l. Exterior half lite doors must:
    - i. Have blinds between the glass provided by the door manufacture.
  - m. High quality vinyl sliding glass doors are acceptable for use at the back door to the patio or deck and must:
    - i. Have multi point locking hardware keyed alike.
    - ii. Include costal hardware.
    - iii. Have blinds between the glass provided by the door manufacture.
3. Windows must be Energy Star rated for zone south central and must:
- a. Have blinds for each window installed.
  - b. Metal blinds are prohibited.
  - c. Type A&B units aluminum blinds are permitted to meet accessibility requirements.
  - d. Provide window manufacturers data sheet (s) with plans.
  - e. Be single hung, double hung, casement or awning. Sliding windows are prohibited.

- f. Be vinyl.
- g. Have appropriate design for exterior finishes.
- h. Windows installed in brick or stucco veneer should not have a J-channel.
- i. Windows installed in siding veneers should have the correct J-channel width.
- j. Windows installed with 1x perimeter trim should have no J-channel.
- k. Not be installed over bathtub/shower.
- l. Be continuously caulked behind the flange and taped per the manufacture's recommendations.
- m. Be installed per window manufactures recommendations.
- n. In ADA Type A units, all windows must meet or exceed all State and Federal accessibility requirements.

## J. Kitchens

1. All kitchen cabinets shall be constructed with solid wood or plywood stiles, rails, doors, and drawer fronts. All cabinets will conform to the performance and fabrication requirements of current year ANSI/KCMA A161.1 and bear the ICC-ES or KCMA Certification Seal.
  - a. Drawers must have dual slide tracks.
  - b. Accessible cabinets with removable fronts must be manufactured to be removable with only a screwdriver.
  - c. Site built cabinets are prohibited.
2. Each kitchen must have at the least the following minimum linear footage of clear countertop that are at or below 36 inches in height above finished floor, excluding the sink and range space:
 

Studio	5.0 linear feet minimum
1 Bedroom	8.0 linear feet minimum.
2 Bedroom	10.0 linear feet minimum.
3 Bedroom	12.0 linear feet minimum.
4 Bedroom	13.0 linear feet minimum.

*Countertop linear footage does not apply to rehabilitation projects.*

  - a. Counter tops may be manufactured post form laminate, granite, or solid surface.
  - b. Site built tops countertops must be constructed of ¾"AC plywood. No particle board, press board or fiber board will be allowed.
3. All units must have an 18 cubic foot minimum Energy Star rated frost free refrigerator freezer with ice maker and: *Rehabilitation projects must provide a 14 cubic foot minimum Energy Star rated frost free refrigerator. Ice maker not required in rehabilitation projects if cost prohibitive base on plumbing.*
  - a. Doors must open beyond 90 degrees to allow bin removal.
  - b. Ice maker box (cold water supply) with shut off must be installed behind the refrigerator.
4. All units must have an Energy Star rated dishwasher and be installed beside the kitchen sink. Dishwasher not required in rehabilitation projects if cost prohibitive based on plumbing or moving of walls.

5. All units must have a double bowl kitchen sink 8" deep minimum.
6. All units must have over the range microwave. With exception of ADA units, see (J)(13)(g) below.
7. All units must have a free-standing range that is at least 30 inches wide or a cooktop and wall oven.
  - a. A backsplash panel must be installed behind the cooktop and cover the entire wall behind the cooktop.
  - b. Anti-tip devices must be installed on all kitchen ranges and be securely fastened to the floor.
8. All units must have a Fire Stop or comparable extinguishing system over the stove. Alternatively, the range must have SmartBurner elements installed in the range.
9. 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 in accessible units. If contained in the cabinet/pantry area must have proper signage, 4"X3" minimum identifying the location.
10. A 24" wide pantry cabinet, same manufacture as kitchen cabinets, or a pantry closet with a 24" interior door and a minimum of 24' deep must be provided in the kitchen. *Pantry cabinet or pantry closet size of 24" does not apply to rehabilitation projects.*
11. Fluorescent lighting or LED lighting is required in the kitchen which must provide 30 footcandle minimum on all counter tops.
12. The aisle width between cabinets and/or appliances is 42" minimum.
13. For Type A units:
  - a. The refrigerator must be ADA compliant.
  - b. Kitchen sinks must be ADA compliant and:
    - i. Be 6 ½" deep maximum.
    - ii. Be rear draining.
    - iii. Sink bottoms insulated if bottom of sink is at or below 29 inches above finished floor.
  - c. The range / cooktop / wall oven must be ADA compliant.
  - d. Pull-out worktops are prohibited.
  - e. Workstations must be installed beside the range with no wall to the left or right of the workstation.
  - f. The wall cabinet mounted over the workstation must be 48 inches maximum above finished floor to the top of the bottom shelf.
  - g. Provide cabinet microwave shelf with microwave or countertop microwave.
  - h. Unit must have a 30" range hood.
    - i. The range hood fan and light must have separate remote switches.
    - i. Provide ADA compliant cabinet handles/pulls on cabinet doors and drawers. Knobs are prohibited.

## K. Bathrooms

1. All bathroom vanities/cabinets shall be constructed with solid wood or plywood stiles, rails, doors, and drawer fronts. All cabinets will conform to the performance and fabrication requirements of current year ANSI/KCMA A161.1 and bear the ICC-ES or KCMA Certification Seal and:
  - a. Drawers must have dual slide tracks.
  - b. Accessible cabinets with removable fronts must be manufactured to be removable with only a screwdriver.
  - c. Site built cabinets are prohibited.
2. Vanities cabinets shall be provided in all units and must be 36" minimum. *Vanities for rehabilitation projects shall be 24" minimum.*
3. Vanity tops may be manufactured post form laminate, granite, or solid surface.
  - a. Site built vanity tops are prohibited.
4. All full bathrooms must have:
  - a. Ceiling light and exhaust fan on the same switch and must provide adequate lighting to the tub/shower.
  - b. Vanity light must be provided and be on a separate switch.
5. All half bathrooms must have:
  - a. Ceiling light and or vanity light, must provide adequate lighting.
  - b. Exhaust fan.
  - c. These can be switch together or separately.
6. Tub/shower units must be 32" x 60" minimum one-piece fiberglass-based units with slip resistant floors.
  - a. Shower head to be mounted 80" above finished floor.
7. Toilet must be centered, at a minimum, 18 inches from sidewalls, vanity/lavatories and bathtubs and be clearly marked on the plans. *Does not apply to rehabilitation projects unless it's a gut rehab including plumbing.*
8. Type A units:
  - a. Must contain a roll in shower and:
    - i. Be one piece fiberglass-based unit with slip resistant floor.
    - ii. Be ADA/ ANSI 117.1 - 2017 compliant from manufacture.
    - iii. Have factory installed grab bars.
    - iv. Have a 36" x 60" minimum useable floor space.
    - v. Have a collapsible water dam or beveled threshold that meets code.
    - vi. Approaches to roll-in showers must be level, not sloped.
    - vii. Have adjustable shower rod and weighted curtain installed before occupancy.
    - viii. Shower floor may not be used for code required 67" clear floor space in bathrooms.
    - ix. The shower head with wand must be installed on a sliding bar and within code required reach ranges by the seat.
    - x. An additional diverter must be installed to provide water to a shower head on the short shower wall in front of the seat, mounted 80" above finished

floor.

- b. Accessible cabinets with removable fronts must be manufactured to be removable with only a screwdriver.
- c. All cabinets in designated handicap accessible units must be installed at ADA mounting heights.
- d. Provide ADA compliant cabinet handles/pulls on cabinet doors and drawers. Knobs are prohibited.
- e. All tub/showers in designated handicap accessible units must come complete with “factory- installed grab bars”.
- f. Provide solid blocking at all toilets and tub/shower units for grab bar installation.

#### L. Bedrooms, Closets and Storage Closets

1. The primary bedroom must have at least 170 square feet, excluding the closet(s). *Does not apply to rehabilitation projects.*
2. Secondary bedrooms must have at least 120 square feet, excluding the closet(s). *Does not apply to rehabilitation projects.*
3. Every bedroom must have a closet at a minimum of 24” deep and contain a 5’ long minimum wire shelf and closet rod. *Closet width of 5’ does not apply to rehabs; however, a 24” deep closet is required for each bedroom.*
4. All interior and exterior mechanical and storage closets must have finished floor coverings.
  - a. Interior closets must have carpet or resilient flooring.
  - b. Interior mechanical closet must be resilient flooring.
  - c. Exterior storage or mechanical closets may have sealed and or painted concrete floors.
5. Newly constructed Single Family, Townhouse and single-story Duplex residential units must have an exterior storage closet provided for each individual unit with:
  - a. A minimum of 16 unobstructed square feet.
  - b. The square footage utilized by a water heater or HVAC air handler in the exterior storage closet may not be included in the 16 square foot calculation.
  - c. Storage closets may not have any dimension smaller than 36 inches in width or depth.

#### M. Laundry Room

1. All developments must have a washer and dryer hookup in each unit and:
  - a. Have a minimum depth of 36” measured from the back of the door.
  - b. Must accommodate a full sized 30” washer and dryer adjacent to each other. *Rehabilitation projects do not have to provide washer and dryer hookups in each unit unless it is a gut rehab.*
2. Stacked washer/dryers are prohibited.
3. Washer water shutoff valves must be installed right side up with the hose connection below the shutoff handle.
4. Dryer vent connection box must be galvanized metal and be 2 inches maximum

- above finished floor.
5. In Type A and Type B units,
    - a. Each clothes washer and dryer must be centered for a side approach only. Rehabilitation projects can utilize front or side approach.
    - b. The washer and dryer clear floor space areas may overlap.
    - c. All electrical, plumbing, and venting rough ins must be centered behind each washer and dryer to allow them to be centered for side approach.

## N. Floor Coverings

All materials must be installed to manufacturer's specifications using standard methods and resulting in the issuance of a manufacturer's guarantee / warranty.

1. Living Areas must have Luxury Vinyl Tile (LVT), Ceramic Tile, Laminate Flooring or Hardwoods.
2. Bedrooms may have carpet.
3. Kitchens, Bathrooms, Laundry room, Mechanical closets, Dining areas, and Foyer/entrance area must have resilient flooring LVT, Sheet Vinyl, VCT or Ceramic Tile. Shoe molding must be installed in all resilient flooring areas.
4. LVT must have a 12mil wear layer and provide a minimum 15-year residential warranty. LVT installed in kitchens, bathrooms, laundry areas and mechanical closets must be 100% waterproof.
5. Sheet vinyl must be a minimum 0.095 thickness and provide a minimum 20-year residential warranty.
6. VCT must be at minimum 0.080 thickness.
7. Ceramic floor tile shall be minimum 12" x 12" and installed over poured concrete slab or cementitious backing material.
8. Carpeting shall comply with FHA -HUD Use of Materials Bulletin No. 44d.
9. Carpet pad must be installed under all carpeting and shall comply with FHA -HUD Use of Materials Bulletin No. 72a.
10. Carpets used in Type A units must be glue-down type without padding.
11. Carpet tile may be used in common area and must.
  - a. Be rated for severe use with a 3.5 or greater TARR rating.
  - b. Be open cell backed, no hard backed tiles.
  - c. Be stain resistant.

## O. Mechanicals

1. Non-Unit, "development", spaces must have separate HVAC systems. AKA "House System"
  - a. Must have a 15 SEER Energy Star rated HVAC system.
  - b. All refrigeration lines must be insulated.
  - c. Must be located within the developments building space.
2. All units must have individual central heat and air, HVAC.
  - a. Manuals J, S & D must be utilized for design requirements. HVAC manufactures J, S & D software can be utilized to provide the required manuals as long as that

- manufacturer's equipment is being installed.
- b. All units must have a 15 SEER Energy Star rated HVAC system.
  - c. All refrigeration lines must be insulated.
  - d. Traditional air handler, heat pump and ducted HVAC system are acceptable.
  - e. Mini split ducted or ductless systems are acceptable.
3. All HVAC air handlers must be contained within the conditioned space of the unit.
  4. Connections in duct system must be taped and sealed with mastic and fiberglass mesh.
  5. All openings in duct work at registers and grilles must be covered after installation to keep out debris during construction.
  6. The use of duct board is prohibited.
  7. Galvanized metal or aluminum must be used for plenums and mixing boxes.
  8. Bottom of returns must be 12" minimum above FFE.
  9. Electric mechanical condensate pumps are not allowed.
  10. All hub drains serving HVAC condensate lines must be piped to the outside. Piping to the sanitary sewer is not allowed unless a primed p-trap is installed.
  11. All bedroom closets, interior storage rooms, coat closets, and laundry rooms/closets must have a 4-inch tall by 8-inch-wide minimum pass-thru grille above doors for air circulation in those areas that do not get conditioned.
  12. There must be a minimum of  $\frac{3}{4}$  inch air space under all interior doors measured from finished floor for air circulation.
  13. All bath exhaust fans shall be rated at 70 CFM minimum vented to the exterior of the building using suitable ductwork along the shortest run possible.
  14. Venting through the roof is prohibited.
  15. Dryer vents must be vented to the exterior of the building using hard ductwork along with the shortest run possible: maximum run is 35' including deductions for elbows.
  16. Vent connection must be centered behind the dryer.
  17. Venting thru the roof is prohibited.

## P. Plumbing

1. Sanitary sewer main lines cannot be located under the slab of a multifamily single-story design, single family homes, townhouses, and duplex developments. The sanitary sewer main line must run on the front, side or back of the building/ structure and provide a sanitary sewer service tie in for each unit.
2. Sub metering, readable, is required for all units in multifamily multi story developments.
3. Individual water meters are required for all units in multifamily single-story designs, Single Family homes, Townhouses and Duplex Developments Does not apply to rehabilitation projects.
4. Unit water cut offs are to be placed in an easily accessible area, at the nearest point where water supply enters the building, and clearly marked with signage.
5. All domestic water line cut off valves must have metal handles, not plastic.

6. Domestic water lines are not allowed in unconditioned spaces.
7. Offset toilet flanges are prohibited.
8. All shower valves to be anti-scald.
9. Water sense fixtures must be used:
  - a. Toilets 1.28 GPM or less.
  - b. Showerheads, Kitchen faucets and Bath faucets 1.5 GPM or less.
10. Washer/dryer hookups in all units. Rehabilitation projects do not have to provide washer and dryer hookups in each unit unless it is a gut rehab.
11. Toilets to be ADA height in all units.
12. Toilets must be centered, at a minimum, 18 inches from sidewalls, vanity/lavatories and bathtubs and be clearly marked on the plans. *Does not apply to rehabilitation projects unless UFAS unit or gut rehab including plumbing; however, it must meet current code requirements.*
13. Water heater for each unit:
  - a. Electric water heaters to have 0.93 UEF minimum, without blanket.
  - b. Gas water heaters to have 0.68 UEF minimum, without blanket.
  - c. 30 gallon minimum for one- and two-bedroom units.
  - d. 40 gallon minimum for three- and four-bedroom units.
  - e. Prohibited to be mounted above equipment or appliances.
  - f. Must be located in the unit's insulated envelope.
  - g. Placed in drain pans with drain piping plumbed to disposal point as per the latest approved addition of the International Plumbing Code.
  - h. Pipe all Water Heater Temperature & Pressure (T&P) relief valve discharges to disposal point as per the latest approved edition of the International Plumbing Code.
  - i. Elevated if necessary for proper pan drainage.
  - j. Use of electric tank less water heaters is allowed with the above requirements and the electrical panel must be rated at 200 amps or greater.
14. All hub drains serving HVAC condensate lines and water heater lines must be piped to the outside. Piping to the sanitary sewer is not allowed unless a primed p-trap is installed.
15. Frost-proof exterior faucets must be provided on every building within a high-rise development on the "House" water supply. Locations should be maintenance based.
16. All single family, Townhouse, Duplex, and single-story development must supply a frost-proof faucet at the front and rear of each unit on the unit's water supply.
17. Safe Drinking Water:
  - a. The architect must certify on the final plans and/or specifications that the project will be constructed using lead-free pipes, solder, and flux.
  - b. Applications proposing the rehabilitation of structures built 1988 or earlier must have the pipes, solder, and flux tested for lead and include a copy of the report with the Tier II Application. Items testing positive for lead must be included in the PNA for replacement.
  - c. Water Testing requirements:

- i. If the project cannot meet the below 15 ppb EPA Action Level threshold, then the project cannot be funded.
- ii. The water must sit in the pipes unused for at least 8 hours but not more than 18 hours before a sample is taken.
- iii. If the building is occupied, resident(s) must be notified, and testing should take place first thing in the morning.
- iv. Single Family – Within the home both kitchen and bathroom taps must be tested.
- v. Multifamily – Within all units within a multifamily building, both kitchen and bathroom taps must be tested.
- vi. All water samples collected should be 1000 mL (1 liter) in volume.
- d. Visual inspections must be performed on the water pipes, solder, flux, and fixtures for the potential risk of lead exposure.

## Q. Electrical

- 1. Units must have separate electrical systems.
- 2. Non-residential, “development”, spaces must have separate electrical systems. AKA “House”
- 3. Hardwired interconnected Smoke Detectors and Carbon monoxide detectors are to be installed as required by all applicable codes and regulations local, state, and federal.
- 4. All switches and thermostats to be mounted no more than 48” above the FFE.
- 5. All receptacles, telephone jacks, and cable jacks to be mounted 15” minimum above FFE.
- 6. Type A & B units the panel box must be set no more than 48” to the highest breaker above the FFE.
- 7. All lighting fixtures to be Energy Star rated.
- 8. All bulbs to be Energy Star rated.
- 9. All units must have an Energy Star rated ceiling fan and light fixture located in the living room and all bedrooms with the light and fan being wall switched separately.
- 10. Overhead lighting is required in all bedrooms, bathrooms, laundry rooms, closets (other than pantries or coat closets), and storage rooms and to be wall switched.
- 11. Exterior lighting is required at each unit entry door and to be wall switched by door unit. Buildings with conditioned interior corridors with access doors at each end with 24/7 “House” lighting are exempt from this requirement at the unit main entry door only.
- 12. All units pre-wired for high-speed Internet hook-up with:
  - a. One centrally located connection port with connection ports in each bedroom,
  - b. Or one centrally located port with wireless internet network provided, per unit.
  - c. All internet lines must be toned and tagged properly to each unit.
  - d. Each building must have an internet termination and demarcation box for internet vendor connection.

13. All units pre-wired for telephone with jacks installed in the living room and one per bedroom.
  - a. All telephone lines must be toned and tagged properly to each unit.
  - b. Each building must have a telephone termination and demarcation box for telephone vendor connection.
14. All units pre-wired for cable television with jacks installed in the living room and one per bedroom.
  - a. All cable lines must be toned and tagged properly to each unit.
  - b. Each building must have a cable termination and demarcation box for cable vendor connection.
15. Development Lighting
  - a. Serviced by the “House” electrical panel.
  - b. Must be located in all common areas, breezeways, corridors, and stairwells and amenities.
  - c. Open areas and amenities must be activated by a photocell placed on the east or north side of the building.
  - d. Conditioned or closed common areas require 24/7 lighting.
  - e. Interior amenities are required to have occupy sensors to control lighting.

## R. Energy Star

1. New Construction Multi Family Developments will:
  - a. Be built to meet and receive the Multi Family New Construction Version 1.1 Energy Star Certification. This includes all mandatory measures; MFNC Rater Design Review Checklist, MFNC Rater Filed Checklist, MFNC HVAC Functional Testing Checklist, MFNC Water Management System Requirements.
2. New Construction Single Family, Townhouses and Duplex Developments will:
  - a. Be built to meet and receive the Version 3.1 Energy Star Certification. This includes all mandatory measures, National Rater Design Review Checklist, National Rater Checklist, National HVAC Design Report, National HVAC Commissioning Checklist, National Water Management System Builder Requirements.
3. Developers must contact the qualified Energy Star consultant directly, and contract to provide the Energy Star compliance services.
4. A pre-construction plan and specification review must be completed by the rater to determine that the proposed property will meet all required Energy Star requirements, including initial comments from the consultant and all documents related to resolution of identified issues.
5. A final inspection of the property after construction completion to determine that the property was constructed in accordance with all Energy Star requirements.
6. All reports must be provided with final inspection request.

## S. Single Family, Townhouse and Duplex Developments

1. All detached single-family homes must contain a minimum of two (2) bedrooms.
2. Duplexes must be a minimum of two (2) bedrooms; may have one (1) bedroom unit if mixed development of one (1), two (2) and three (3) bedroom units.
3. Townhouses must contain:
  - a. a minimum of two (2) bedrooms; may have one (1) bedroom unit if mixed development of one (1), two (2) and three (3) bedroom units.
  - b. Townhouses without a bed and bath on the main floor will be required to have a half bathroom located on the main floor.
  - c. Townhouse definition: A single family dwelling unit constructed in a row of three or four attached units two or three stories tall in which each unit extends from foundation to roof with a yard or public way in the front and back. Each unit would be on a separate lot (property line between units) with its own separate street address.
4. Must have concrete driveways, curbing at street and front entry walkways. Curbing at street will be waived for scattered site developments.

## Housing Rehabilitation Standards

### I. Rehabilitation Construction Standards

#### A. General

1. All work regarding handicapped accessibility must meet the requirements of 2010 ADA and ANSI Section A117.1.
2. All material used shall be new, in new condition, and of standard grade.
3. All work performed shall be “finished” work. For example, if an exterior door unit is specified, then that unit shall be painted/finished, and new lockset installed.
4. All work shall be performed and completed in a manner supported by the manufacturer’s specifications, standard construction practices, and/or recognized building codes.
5. All material or products replaced should be of like kind but not luxury.
6. Luxury products and/or repairs are not permitted, such as swimming pools.

#### B. Effective Useful Life (EUL)

1. The EUL is the amount of time during which for e.g., products, materials, systems, equipment is expected to remain in good useful condition.
2. EUL is not a warranty.
3. The EUL includes the assumption that any and all maintenance is performed within appropriate time as to not cause any damages. Deferred maintenance will drastically reduce the EUL up to terminating the EUL.

#### C. Roofing and Gutters

1. Replaced Pitched shingled roofs shall have an EUL of twenty-five (25) years.
2. Replaced Low Slope roofs shall have an EUL of ten (10) years.
3. Roofs that are leaking or have holes or patches or less than ten (10) years of remaining useful life shall be replaced.
4. Townhomes, duplexes, or other owner-occupied homes that have any shared walls are not eligible for roofing replacement unless all shared wall households are income eligible or have a parapet wall in place on the roof line.
5. Three-tab shingles may be used on pitches of 2/12 and greater.
6. Architectural shingles may be used on pitches of 4/12 and greater.
7. Roofs with pitches of 2/12 and less must be covered with a low slope roofing product such as modified bitumen, EPDM or TPO. No torch down products. These products must be installed per manufacturer’s recommendations.
8. Existing metal roof such as a mobile home that is in good repair can be coated with Gaco Roof 100% Silicone roof coating or similar roof product. This product must be installed per manufacturer’s recommendations.

9. Roof shingle and low slope roofing product replacement must include:
  - a. Complete tear off down to bare roof deck
  - b. Replacement of damaged sheathing
  - c. New synthetic felt.
  - d. Drip edge
  - e. Step and counter flashings
  - f. Chimney flashings, if necessary
  - g. Valley lining
  - h. Ice and water shield
  - i. Ridge vent
  - j. Pipe boots
  - k. Roof penetration flashing. Example range hood vent, gas vent
  - l. Replacement and /or painting of fascia, soffit, siding or trim, if necessary.
10. Step Flashing must be factory painted 0.019" thickness minimum, 4"h X 4"w X 8"L minimum step. Includes Ice & Water on deck and up sidewall.
11. Counter Flashing must be factory painted 0.019" thickness minimum. Masonry counter flashing must be cut in 1" deep crimped over and sealed with roof caulk. Non-masonry counter flashing must include a face reglet to be sealed with roof caulk. Includes Ice & Water on deck and up sidewall.
12. The racking application of shingles is prohibited.
13. Replacement of existing metal roofing is allowed if required by the structure of the home or historical society.
  - a. Metal roofing must be installed per the manufacturer's recommendations including all trims.
  - b. Metal roofing requires a complete tear off of existing roof covering down to bare roof deck.
14. Documented water damage to ceilings and walls may be repaired as part of the roof replacement.
15. Gutters can be installed if required to disperse water away from the foundation to resolve foundation / crawl space water issues and must.
  - a. Be aluminum seamless gutters.
  - b. Have a leaf guard system, screen wire leaf guard systems are prohibited.
  - c. All water from gutter system must be discharged no less than six (6') feet from the building foundation by:
    - i. Concrete splash blocks with positive sloped drainage away from foundation; or
    - ii. Be piped underground to an appropriate location.

#### D. HVAC Work

1. Replaced HVAC equipment shall have an EUL of fifteen (15) years.
2. Replaced HVAC distribution system shall have an EUL of 25 years (25) years.
3. Repaired HVAC distribution system shall have an EUL of fifteen (15) years.
4. HVAC Equipment may be replaced instead of complete unit replacement if:

- a. HVAC equipment repair or replacement, less than 10 years old and would bring the distribution system EUL back to fifteen (15) years.
  - b. HVAC equipment must be 15 SEER with 12.0 EER Energy Star rated at a minimum.
  - c. HVAC equipment must have a minimum ten (10) year parts warranty including the compressor.
5. New first time HVAC systems may be installed.
    - a. HVAC equipment must be 15 SEER with 12.0 EER Energy Star rated at a minimum.
    - b. HVAC equipment must have a minimum ten (10) year parts warranty including the compressor.
  6. Duct work may be repaired or replaced and must be:
    - c. Appropriately sized.
    - d. Insulated to R-8 minimum.
    - e. Sealing of joints and seams shall be with UL listed bucket mastic (not tape). HVAC equipment must be registered thru the manufacturer for the warranty by the Contractor. A copy of the warranty registration must be provided to Berkeley County prior to being reimbursed for the HVAC equipment.
  7. A 200 AMP service upgrade to electrical is permitted if necessary for HVAC install.

## E. Sewer/Septic Systems

1. Replaced septic systems shall have an EUL of twenty (20) years.
2. Repaired septic system shall have an EUL of ten (10) years.
3. Existing systems that are nonfunctioning or malfunctioning may be repaired or replaced.
4. A detailed quote from a DHEC licensed septic tank Contractor is required that includes pumping services, tank size, drain field type and footages, discarding of existing tank, straw and seed of disturbed area and type of materials to be used, etc.
5. Must also provide sketch (may be hand drawn) of the proposed layout.
6. Photographs are required of all steps of the installation that clearly show the materials being used.

## F. Water Wells

1. Replaced water wells shall have an EUL of fifteen (15) years.
2. Repaired water wells shall have an EUL of five (5) years.
3. Existing water wells with broken pumps can be repaired or replaced.
4. In the event existing water wells have gone dry or contaminated beyond repair, the County HOME funds can be used to dig the well deeper or dig a new well.
5. A detailed quote from a licensed well driller that includes proposed depth and materials being used is required.

## G. Handicap Dwelling Accessibility

1. Replaced or repaired accessibility features shall have an EUL of ten (10) years.
2. Installation, repair and or alterations of accessibility features for disabled or

handicapped beneficiaries must meet current ADA, ANSI, and SC Building Code requirements, e.g., accessible tubs or showers, grab bars, railings, path of travel, turn arounds, clear floor spaces, and reach ranges.

## H. Handicap Ramps

1. Replaced handicap ramps shall have an EUL of twenty (20) years.
2. Repaired handicap ramps shall have an EUL of ten (10) years.
3. Installation or repair of ramps for disabled or handicapped beneficiaries must meet current ADA, ANSI, and SC Building Code requirements.
4. Ramps can be constructed of treated wood products.

## I. Structural

1. Repaired or replaced structural systems shall have an EUL of forty (40) years.
2. Any part of the foundation, floor system, sub-flooring, walls, ceiling, roof system, chimneys and other items affecting structural integrity may be repaired or replaced.
3. Foundation replacements are beyond the scope of this program and prohibited.
4. Piers can be added, replaced, or repaired and must be masonry with a footing.

## J. Exterior Surfaces

1. Replaced exterior surfaces shall have an EUL of twenty (20) years.
2. Repaired exterior surfaces shall have an EUL of ten (10) years.
3. Damage exterior surfaces may be repaired with like materials containing no lead-based paint, asbestos, or other harmful contaminant(s).
4. Damaged exterior surfaces that require replacement shall be vinyl siding with a minimum thickness of .040".
5. Rake, Eave (facia) and boxing materials that require extensive repair or replaced should consist of vinyl and coil stock materials.

## K. Exterior Doors

1. Replaced exterior doors shall have an EUL of twenty (20) years.
2. Door replacement shall be Energy Star rated steel or fiberglass door unit.
  - a. Wood slab replacements will be allowed if door unit replacement is impactable.  
Door and frame mortise must be correct and professional in appearance.
3. Exterior door replacements must include new locksets and hardware, including thumb latch deadbolt.
4. Doors must be installed per manufacturer's recommendations and painted/finished on all six sides along with the frame.
5. Peep hole/door views are required on all six panel or flush slab doors with no sidelight or window next to the door. Installed at the appropriate height for the beneficiary.

## L. Windows

1. Replaced windows shall have an EUL of twenty (20) years.
2. Repaired windows shall have an EUL of ten (10) years.
3. Replacement windows shall be vinyl double hung Energy Star rated windows.
4. Replacement windows must meet disaster mitigation requirements (e.g., coastal hurricane) including any protection requirements (e.g., hurricane panels).
5. All windows and trim must be wrapped with coil stock trim.
6. Windows will not be installed for weatherization alone.
7. Broken glass in windowpanes will be repaired if possible and feasible.

## M. Interior Doors

1. Replaced interior doors shall have an EUL of fifteen (15) years.
2. Replacement doors shall be Masonite and should match the design of the other doors when feasible.
3. Door slab replacement must include new hinges and lock sets. Door and frame mortise must be correct and professional in appearance.
4. Door units must include new locksets with privacy locks where required.
5. Doors must be installed per manufacturer's recommendations and painted/finished on all six sides along with the frame.

## N. Flooring

1. Replaced or repaired flooring shall have an EUL of fifteen (15) years.
2. Existing hardwood floor in good repair shall be refinished.
3. Replacement flooring shall be LVT full glued or floating (depending on existing subfloor conditions) with a twenty-year (20) minimum warranty. Must be water-resistant when installed in bathrooms or the kitchen.
4. Sheet Vinyl is acceptable to be installed in bathrooms, kitchens, and utility rooms and must be full glued with twenty-year (20) minimum warranty.
5. Transition and/or seam binder strips are prohibited to cross an entire room. They are acceptable for use at doors ways and room to room or hall transitions.
6. Underlayment for LVT and Sheet Vinyl must be either a rated underlayment which will have X's all over it or BC pine plywood. Photos are required of the installed underlayment.

## O. Painting

1. Painting shall have an EUL of fifteen (15) years.
2. All paints, sealant and primers must be low VOC with a minimum twenty-year (20) year warranty.
3. All surfaces covered with paint require a minimum of one (1) coat of primer and two (2) coats of paint.
4. All finishes must be washable, flat paint finishes are prohibited for use except on ceilings.

## P. Kitchen/Bath Cabinets and Counter Tops

1. Replaced kitchen cabinets and counter tops shall have an EUL of twenty (20) years.
2. Replaced Bath cabinets and vanity tops shall have an EUL of twenty (20) years.
3. Cabinets and bath cabinets shall be constructed with solid wood or plywood stiles, rails, doors, and drawer fronts. with a twenty (20) year warranty.
4. Drawers must have dual slide tracks.
5. Site built/custom cabinets are prohibited.
6. Countertops shall be manufactured post form laminate, granite level 1 or site built; site- built countertops must be constructed of ¾" AC plywood with minimum 4" back and side splashes.
7. Vanity tops shall be solid surface (such as cultured marble), manufactured post form laminate, granite level 1 or site built; site-built countertops must be constructed of ¾" AC plywood with minimum 4" back and side splashes.

## Q. Electrical

1. Replaced electrical distribution shall have an EUL of forty (40) years.
2. Replaced electric fixtures shall have an EUL of ten (10) years.
3. Systems or fixtures that are nonfunctioning or malfunctioning may be repaired or replaced.
4. All lighting fixtures shall be Energy Star rated with Energy Star rated bulbs.
5. Ceiling fans shall be 52" with light kit that are Energy Star rated.
6. Smoke and Carbon Monoxide alarms shall be hard-wired with battery back-ups unless the existing ceiling structure does not feasibly allow for the installation of hard-wired, battery backup detectors. If hard-wired battery back-up detectors are not able to be installed feasibly, battery powered Smoke and Carbon Monoxide alarms shall be interconnected with a ten (10) year battery.

## R. Plumbing System

1. Replaced plumbing distribution system shall have an EUL of forty (40) years.
2. Repaired plumbing distribution system shall have an EUL of fifteen (15) years.
3. Replaced or repaired plumbing fixtures shall have an EUL of Fifteen (15) years.
4. Replaced water heaters shall have an EUL of ten (10) years.
5. Systems or fixtures that are nonfunctioning or malfunctioning may be repaired or replaced.
6. All faucets and shower heads are to be Delta, American Standard or Moen. No plastic bodied faucets. ADA compliant and WaterSense certified.
7. Toilets are to be ADA compliant and WaterSense certified.
8. Kitchen sink shall be stainless steel, double bowl, 8" deep minimum (ADA dwellings 6" deep).
9. All supply lines are to be metal braided.
10. Escutcheons are required at all penetrations.
11. Water Heaters shall be 38-40 Gal. with a six (6) year minimum warranty and be installed per current SC Building codes with drip pan installed, drip pan, and T&P

pipped outside, disconnect with platforms, strapping and expansion tanks as required.

12. Tankless Gas Water are acceptable for use when swapping out from a gas tanked heater to tankless must be 5.5 GPM minimum.

## S. Porches/ Decks/ Railings/ Ramps/ Landings

1. Replaced porches, decks, railings, ramps, and landing shall have an EUL of twenty (20) years. Replaced porches and decks shall not be extended or upgraded unless otherwise required to meet code or property setbacks.
2. Repaired porches, decks, railings, ramps, and landing shall have an EUL of ten (10) years.
3. Can be repaired or replaced.
4. All repairs must be of like materials.
5. All lumber shall be treated.
6. Handrails and railing can be built from treated wood or be of steel, aluminum or vinyl and must be ridged.
7. Handrails must be graspable as per current SC Building code.
8. Concrete landings shall be installed on compacted soils, be four (4) inches thick, not exceed 2% slope and be broom finished.

## T. Energy Efficiency Weatherization

1. Energy efficiency weatherization shall have an EUL of twenty (20) years.
2. Blown in attic insulation, shall be installed, or upgraded to R-30 minimum and must include installation of depth tape and insulation card in attic.
3. R-13 Wall insulation shall be repaired or upgraded when walls are opened.
4. R-19 Floor insulation can be repaired or added if all Essential Property Standard issues have been resolved.
5. Crawl space vapor barrier shall be 6 mil thickness or greater covering one hundred (100%) percent of the ground.
6. Weather stripping installed must be of premium grade, self-adhering foam is prohibited.

## U. Grading

1. Grading shall only be completed in extenuating circumstances where it is necessary to make another major system operable.
2. Grading shall have an EUL of ten (10) years.
3. Grading next to the dwelling structure shall be completed with minimum impact to the surrounding lawn and landscaping.
  - a. Grading shall provide a five (5%) percent slope away from the building for a minimum of five (5) feet that provides positive drainage.
  - b. Any off-site fill soils required for grading must be of the same type present on site and be free from organics and debris.

- c. Disturbed soils shall be compacted to ninety-five (95%) percent of the soil's maximum dry density.
- d. All graded and disturbed bare sections of lawn created by repairs will be strawed and seeded with drought resistant grasses.

## V. Trees

1. Trees or tree limbs that are hazardous/causing an immediate or impending safety risk/danger to the structure must be removed.
  - a. Contractor must ensure removal, topping, pruning etc. is allowed by local ordinances.
  - b. Contractor will be required to provide documentation from the AHJ that the tree work proposed meets local ordinances.
  - c. Contractor must provide a detailed estimate for all tree work.
  - d. Trees that are removed may include cutting close to the ground with in six (6) inches or grinding up to twelve (12) inches below finished grade.
  - e. Contractor must abide by local arbor regulations.

## W. Appliances

1. Appliances shall only be replaced in extenuating circumstances where the existing appliances are not sanitary.
2. Appliances should be replaced in existing like kind.
3. Luxury appliances are prohibited for repair or replacement.