

# Housing Standards Guide

The City of Columbia CDBG Disaster Recovery Program

Revised January 20192020

This document will assist homeowners, housing inspectors, contractors, and their respective agents in understanding the construction guidelines required by the City of Columbia CDBG Disaster Recovery Program. The City offers three residential rehabilitation programs for the repair of storm damages resulting from the October 2015 Flood and provision of standard, basic amenities essential to making a home decent, safe and sanitary. Housing Inspectors will inspect each eligible property to assess the condition of the home, verify storm related damage, and identify repairs necessary to meet local building codes and minimum property standards, increase energy efficiency and provide a decent, safe and sanitary home as addressed in the CDBG Disaster Recovery *Housing Standards Guide*.

This document covers the minimum construction/rehabilitation requirements for the Columbia Homeowner Assistance Program (CHAP), the Small Rental Repair Program (SRRP), and the Minor Repair Program. The City of Columbia Disaster Recovery staff reserves the right to make the final determination on matters of program compliance as it relates to these housing standards.

All homes utilizing CDBG Disaster Recovery funds will be constructed using energy saving materials and techniques when possible. All construction activities identified in the project scope of work must meet current City of Columbia building codes as enforced by Development & Planning Services and be performed by a licensed contractor pre-qualified by the City. All construction contracts are contingent upon written approval by the City of Columbia.

All construction activities must comply with all applicable codes, ordinances, regulations, laws, and other requirements per federal, state, and local governments to include CDBG-DR specific requirements associated with the Disaster Relief Appropriations Act of 2016. [Public Law 114-3, June 17, 2016] Improvements may include:

- Lead-based paint or asbestos mitigation
- Mold remediation
- Accessibility features for those with special needs
- Standard appliances limited to refrigerator and stove/oven

## Definitions

Acceptable	In a condition that is favorable to all parties involved including the City.
Defective /defects	In a condition unlike that which was original at time of construction; not working properly or missing parts that are needed for a complete unit; not in a "finished out" condition;
Deteriorated	In a state of disrepair; not structurally sound; rotten; not "finished out;"
Excessively damaged	Damaged to a point where pavement is separated ½" or more in any direction.
Finished out	In a condition favorable to all parties involved including the City; like new condition' in a condition that is widely accepted as complete in the construction industry.
Free-and-clear/free of	Not containing; absent of
Functioning properly	Working in a manner consistent with that which it was originally designed to operate
Good working order	Working in a manner consistent with that which it was originally designed to operate
Good condition	In like new condition
Like new condition	In a condition favorable to all parties involved including the City; functioning properly; free of defects; good working order
Notable	Obvious; visible; apparent
Not suitable for rehabilitation	Dwelling units where substandard conditions threaten the health and safety of its occupants and it is not financially or structurally feasible for rehabilitation.
Originally designed/manufactured	In like new condition and working in a manner as was originally constructed to operate
Over spanned	Exceeding an acceptable length as determined using standard engineering design practices
Patchwork	Any work where joints, seams, or any other types of intersections of materials are noticeable to the naked eye from a distance of 5 feet from the area in question (not to include obvious joints at inside and outside corners).
Structure	Any building supported by a permanent foundation
Structurally sound	Capable of supporting all imposed loads; free of excessive deterioration

**Demolition:**

In cases where damages exceed 55% 65% of the pre-storm Fair Market Value (2014 tax assessed value + 10%) of the home, property information will be submitted to the City for review and the City will recommend how to proceed with any possible rehabilitation. All debris shall be removed from premises weekly unless contained in a commercial grade trash container, dump truck, trailer, or other vehicle used specifically for debris removal. The debris may remain on premises until the container is filled to a reasonable capacity, when it shall be removed from premises. All debris shall be taken to an approved landfill as determined by the South Carolina Department of Health and Environmental Control (DHEC) based upon the composition of material, including any lead-based paint, asbestos, or other hazardous waste.

**Foundation:**

- Foundations shall be structurally sound; all deteriorated and/or over spanned building components shall be replaced and/or properly supported. The City reserves the right to require an inspection by a licensed structural engineer registered to practice in South Carolina to determine the structural soundness of the component.
- All foundation vents shall be screened and allow water to enter the crawl space.
- All crawl spaces shall have adequate ventilation.
- Structures shall be treated for subterranean termites by a state licensed exterminator who shall issue an *Official South Carolina Wood Infestation Report* showing that the structure is free of infestation or damage caused by any wood destroying insects or fungi. Structures treated within the last five years by a state licensed exterminator may be exempt from re-treatment upon receipt of documentation confirming treatment.
- Wood products shall not come in contact with grade under a structure. Piers shall be permanent masonry units with poured concrete footings.
- Existing structurally sound masonry piers may remain in place. Stacked masonry units, wooden piers, and metal jacks are prohibited for use as piers.
- Accessory doors and windows located below main level of structure and all sub-flooring shall be considered part of the foundation.
- 100% of the grade area of housing with a crawl space shall be covered with a minimum 6-mil vapor barrier overlapping a minimum of 6" at piers and seams.

**Yard:**

- Necessary measures shall be taken to improve drainage away from structures and to prevent erosion. Water shall not be diverted into adjacent property or directly into a City right-of-way.
- All tree limbs within six feet of structure shall be cut. Any tree where root system is undermining structure shall be permanently removed from site, including stump.

**Siding:**

- Moisture and termite damaged exterior wood products and any defective [split, large knot holes, etc.] exterior wood products shall be replaced with material matching the remaining wood products.
- Other types of damaged siding [brick, block, vinyl, aluminum] will be replaced with in-kind materials.

**Porches & Steps:**

- Porch and step components shall be structurally sound and missing materials will be replaced.
- All wood products used in steps and flooring located 18 inches or lower from the ground must be treated material.

**Windows:**

- Only storm damaged windows will be replaced.
- At least one window in each bedroom must operate as originally designed and must be free of defects [cracked glass, brittle spackling, defective hardware, etc...] to meet code egress requirements.
- Screens must be in like new condition. If shutters are present they must be free of defects and must be properly secured to structure.
- New windows must be of insulated glass of insulated glass, and be EnergyStar® certified for the Columbia, SC region.

**Exterior Doors:**

- Exterior doors must operate as originally designed and must be free of defects [cracked glass, brittle spackling, defective hardware, splits in wood, etc...], air tight, and insulated or be used in conjunction with storm doors.
- Storm doors must include a pneumatic closure and a latch.

**Roof:**

- Roof system must be free of leaks, structurally sound, clear of any foreign matter
- All substantially damaged roofs will include roof venting at all ridges.
- If attic vents are present, they must be screened with a maximum of 1/8" sieve wire mesh.
- Gutters are not recommended, but when present must be functioning properly and include splashguards at downspouts.
- Radiant barrier sheathing will be installed when building a new roof.

**Electrical:**

- Electrical systems must be functioning properly.
- All electrical components must be inspected including service, meter, wiring and fixtures even if no electrical work is specified. Unsafe components must be replaced. All exposed wiring, switches and light bulbs in living areas must be encased.
- All bedrooms and hallways must have electric, interconnected smoke detectors with battery backup. A carbon dioxide detector is also required if the structure contains gas appliances or an attached garage.
- Three prong outlets without ground-fault wiring must be labeled as such.
- All splicing must take place inside a junction box and include caps and tape.
- Any bathrooms without an operable window must include an exhaust fan vented outside the structure.
- Fixtures must be in good working condition.

**Plumbing:**

- Supply and drain lines must be in good condition and functioning properly for the distribution of water and the removal of all waste from premises and be connected to a system approved by DHEC.
- Fixtures must function properly, be secured to structure, and be free of any defects [chipped enamel, rust, cracks, leaks, etc...]. Existing tub and shower surrounds and pans must be in good condition and watertight.
- All new fixtures must be water conserving and meet the following specifications: toilets 1.28 gpf, showerheads 2.0 gpm, bath faucet 1.5 gpm, & kitchen faucet 2.0 gpm [gpf= gallons per flush; gpm= gallons per minute]
- Water heaters must function properly, be installed per new construction building code, and be free of notable rust-through on housing units. All water heater units outside of heated space must be insulated to an R-8 value and elevated at least four inches above adjacent grade. Newly installed water heaters must meet efficiency requirements as follows: □40 gallon - gas 0.61 /electric 0.93 □50 gallon- gas 0.59 / electric 0.92
- Outdoor water heating piping shall be insulated to a minimum R-4. Tape all seams in pipe insulation with HVAC metal duct tape.
- Dryer venting inside walls, attics, or crawl spaces must be rigid metal; ductwork must be vented directly outdoors with all joints and seams sealed with HVAC metal duct tape or mastic.

**Heating & Air Conditioning:**

All structures must contain a central heating system in good working condition that is capable of maintaining a temperature of 68 degrees Fahrenheit [at three feet above floor level] in all habitable rooms.

- Ductwork must meet or exceed EnergyStar® for Homes duct leakage standard with a leakage rate of 5% or less when measured with a *duct blaster* or similar diagnostic device. All accessible ducts shall be insulated to R-8.
- New systems shall be EnergyStar® compliant, have a minimum AFUE rating of 95% and a minimum SEER rating of 14.5, and include ductwork insulated to a minimum R- 8 value. [Installer shall certify that the system meets the minimum requirements.]
- All new heating and air conditioning equipment shall be sized in accordance with the Air Conditioning Contractors of America Manuals Parts J and S, or 2012 or most recent edition ASHRAE Handbook – HVAC Systems & Equipment. City Community Development staff reserves the right to make exceptions to the above requirements as long as installed system meets EnergyStar® requirements for the Columbia, SC region.

**Interior Walls & Ceilings:**

- All interior walls and ceilings must be structurally sound, and *finished out* in a uniform manner widely accepted as a standard method of building construction.
- Repairs may include cracks, nail pops, buckling, materials not bonding, torn wallpaper, holes, exposed framing, delaminated material,
- Textured ceilings with obvious patching is not an acceptable method of ceiling finish.

**Insulation:**

Existing walls exposed during construction shall be insulated to meet the following R values: Ceilings, R-38; Walls, R-13; Floors, R-19.

**Fireplace:**

- All chimneys shall be structurally sound and in safe working condition.
- All fireplaces shall have tight fitting dampers.
- Chimneys not meeting these requirements shall be permanently sealed at all openings.

**Interior Trim:**

- All storm damaged trim shall be repaired or replaced with a material matching the remaining trim in each room.
- All door and window hardware shall function properly and any missing hardware installed to bring door and window back to working condition.
- Bedroom and bathroom doors shall include privacy latches.

**Kitchen:**

- All cabinets shall be in good working order
- Cabinets and countertops shall be free of water damage.  
New cabinetry shall be a minimum of 24 cf of wall cabinet storage and 40 cf of base cabinet storage in each kitchen.

**Bathroom:**

- All bathrooms shall include a mirror, towel bar, tissue holder, shower rod (where applicable), and storage cabinet.
- Existing fixtures shall be in good working condition.
- Vanity tops shall be secured to cabinet and sealed at all edges to prevent water infiltration.
- Tub and shower surrounds shall be watertight and in like new condition.

**Floors:**

- All sub-flooring shall be structurally sound. Particleboard sub-flooring shall never be used as a sub-floor replacement within four feet of any water source. [This includes supply lines inside wall cavities, but does not include supply lines underneath the floor.]
- Damaged flooring material will be replaced with standard grade carpet, vinyl, or tile.
- Newly installed carpet shall be a minimum 34 oz. FHA approved carpet with a minimum ½" padding. Padding must meet or exceed federal VM 44 specifications.
- Newly installed vinyl flooring must conform to federal specifications, be a grade "C" or better and be installed per manufacturers' specifications.
- All new flooring must be installed consistent with methods widely used in the construction industry.
- Painted floors are not acceptable unless pre-approved by City staff.

**Painting:**

- Interior and exterior painted surfaces damaged by the storm will be repainted.
- All window glazing must be in like new condition.
- Stained woodwork must include a finish sealer type coating.
- All open seams or joints must be caulked or filled consistent with methods widely used in the construction industry.

**Appliances:**

- All habitable structures shall include a kitchen equipped with a minimum 16 cubic foot refrigerator and a standard size stove or oven.

- A stove hood must be installed above any appliance designed for surface cooking when cabinetry is above the appliance.
- Appliances must be clean and in working condition.
- All new refrigerators, dishwashers, and washing machines must be EnergyStar® certified products.

**Miscellaneous:**

- Non-essential items include fencing, detached garages, out buildings, patios, hot tubs, hardwood floors, ceramic tile, security systems, fireplaces, decks, stained glass windows, marble and granite countertops.
- Swimming pools and room additions are not allowed.