

Appendix A: Housing Quality Standards

Version 1.3 (updated October 1, 2024)



Introduction

The Single Family Repair and Replacement Program has developed these Housing Quality Standards (HQS) as a guide to identifying and correcting conditions in single family homes to be rehabilitated. All single-family construction work shall adhere and comply with these standards as well as State and local building codes, ordinances, and zoning requirements, as applicable.

The intent of the HQS is to provide minimum standards for the repair of homes that sustained damage from Hurricane Ian. With a baseline of decent, safe, sanitary, and resilient, any and all repairs and replacements completed through this program must be to the standards set forth below. The HQS outlines the level of work required by the County of Volusia for homes receiving rehabilitation assistance.

The rehabilitation of single-family homes must address all conditions that threaten the immediate health or safety of occupants, and provide sanitary living conditions. When appropriate, assistance may be provided for safety and resiliency from future weather-related events, regardless of whether the root cause of the deficiency was Hurricane Ian. The HQS are provided as a minimum and do not include all applicable building codes, material accessibility standards, installation methods or other requirements that apply to construction.

The HQS shall not overrule or contradict any federal, state, or jurisdictional requirements. All projects must follow applicable statutes, codes, ordinances, standards and regulations. Inspections will be conducted to confirm compliance with HQS. The HQS will incorporate Green and Resilient Building Standards of construction and utilize ENERGY STAR rated efficiency equipment where applicable.

General Conditions

Specifications:

The following apply to all construction projects carried out by the program:

- Installation of all products and materials shall be in accordance with the manufacturer's installation instructions and local code requirements.
- All products and materials shall be new.
- All work completed through the program project must be completed in a sound, solid, manner, and free of defects.
- Economy/Standard grade materials will be used in accordance with Xactimate pricing. Any in-kind material that cannot be replaced with program-authorized standard grade materials is not eligible for repair.
- All electrical work shall comply with the National Electrical Code (NEC) if required by the authority having jurisdiction and be completed by a state licensed electrician.
- All plumbing work shall comply with the International Plumbing Code if required by the authority having jurisdiction and be completed by a state licensed plumber.
- All HVAC work shall comply with the International Mechanical Code if required by the authority having jurisdiction and be completed by a state licensed HVAC technician.

Definitions:

- "Install" means to purchase, deliver, set up, test and warranty a new component.
- "Rehabilitation" refers to the repair or restoration of a single family housing unit that has sustained damages caused by Hurricane Ian.

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- “Replace” means to remove and dispose of a component in addition to the installation of a new component.
- “Repair” means to return a component to like new condition through replacement of parts.
- “Reinstall” means to remove, clean, store, and install the same component.
- “Balcony” means a platform protruding from a wall that is enclosed by railings and does provide access to the ground.
- “Deck” means wooden platform attached to a house that may or may not be enclosed by railings and does provide access to the ground. Decks may be eligible if properly permitted.
- “Porch” means a paved or wooden surfaces having a roof and attached to the primary structure.
- “Patio” means a ground level paved surface without a roof.

Green and Resilient Building Standards:

For Substantially Damaged Homes:

All substantially damaged homes will meet or exceed the ICC-700 National Green Building Standards (NGBS).

For Non-Substantially Damaged Homes:

ORR will follow the guidelines specified in the HUD CPD Green Building Retrofit Checklist, to the extent applicable to the particular building type being retrofitted, available at:

<https://www.hud.gov/sites/dfiles/CPD/documents/CPD-Green-Building-Retrofit-Checklist.pdf>

Energy Efficiency:

Products and appliances replaced as part of the program project must be ENERGY STAR-labeled, as applicable.

Health & Safety:

Decent, Safe, and Sanitary:

In general, a home that is decent, safe, and sanitary, is one that meets the following criteria:

- Is structurally sound, clean, weathertight, and has adequate dwelling space;
- Has adequate and safe electrical wiring systems for lighting, appliances, and other electrical services, where applicable;
- Has adequate heating and cooling for local climatic conditions;
- Provides reasonable accommodations for occupants with accessibility issues;
- Has well-lighted and ventilated bathrooms that afford privacy to the user, contain a sink, bathtub, flush toilet, and/or shower stall, are properly connected to hot and cold water, and are in good working order and connected to a sewage draining system;
- To ensure that all residents live in safe, habitable dwellings, the items and components located inside and outside the dwelling must be functionally adequate, operable, and free of health and safety hazards.

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Accessibility Needs:

Homes occupied with a household member with a documented disability may request modifications to the home based on the specific need of the household member and available accessibility options from the program. Home modifications may include accessibility improvements, technical enhancements and/or devices that will allow the household member to remain independent in their own home. Any accessibility feature that was present in the home of a disabled person and damaged due to the storm will be assessed for replacement.

Lead-Based Paint:

All homes built prior to 1978 that will be rehabilitated should receive a lead-based paint inspection by a qualified inspector prior to program project award. An EPA Certified Firm and an EPA Certified Lead Renovator shall be required to work on homes tested, and found positive, for lead-based paint as well as those presumed to have lead-based paint present.

The rehabilitation of homes built prior to 1978 shall comply with the Environmental Protection Agency's (EPA) Renovation, Repair and Painting Final Rule (RRR). Federally funded rehabilitations shall comply with the HUD Lead Safe Housing Rule and homeowners cannot opt out of work practice requirements.

Asbestos:

Potential disturbance of any asbestos containing materials shall be identified by the assigned contractor and addressed in accordance with all Federal regulations.

Smoke Alarms and Carbon Monoxide Alarms:

All homes must have functional smoke alarms as required by the building code, and homes that contain gas utility services must also include carbon monoxide alarms.

Wood Destroying Organisms (WDO):

All homes shall be free from infestations of WDO. If required, inspections shall be performed by state licensed extermination contractors if evidence of infestation exists. One or more of the following termite treatments shall be included in the rehabilitation if infestation is observed:

- chemical termiticide treatment
- termite baiting system installed and maintained according to the manufacturer's label
- use of pressure-preservative treated wood
- use of naturally durable termite resistant wood
- and/or termite shields

Site Conditions

Grading & Draining:

The program will address grading and drainage issues on a case-by-case basis. Either sod will be placed or bare Earth will be seeded wherever grading has taken place.

Paving & Walkways:

Essential paving, such as front walkways, door landings, and driveways, that have defects and cracks that present a tripping hazard and/or elevation between paving pieces greater than 1" must

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be repaired to protect against tripping hazards. Sidewalks shall not be addressed through this program.

Trees:

Trees and shrubs should be located a sufficient distance from foundations, sidewalls, walkways, driveways, patios, and septic systems in order to avoid future damage from root growth and branches brushing against the structure.

Exterior Building

Exterior Siding:

Repair Criteria	Replacement Criteria
Siding and trim that is not intact, weatherproof, or has deteriorated/ing paint within 25% of that exterior wall/surface, where repair can be completed with “in Kind” materials and color.	Siding and trim that is not weatherproof and is deteriorated/ing beyond the repair criteria. When replacement of all exterior walls/surfaces is required, fiber cement board must be used, all other exterior wall/surface replacements will be with in-kind materials and color.

Exterior Porches [paved or wooden surfaces having a roof]:

Repair Criteria	Replacement Criteria
Deteriorated and unsafe porch components, including uneven surfaces, must be repaired to remove structural deficiencies. Wire mesh screens that are unfastened but otherwise intact may be repaired.	Significantly deteriorated porches that prohibit safe egress. Deteriorated structural components shall be replaced with similar materials as allowed by the program; wood materials must be pressure-treated. Wire mesh screens that are torn, rusted, or otherwise irreparable must be replaced.

Exterior Railings:

Repair Criteria	Replacement Criteria
Deteriorated and unsafe hand rails must be repaired with similar materials.	Severely deteriorated, missing or unsafe hand rails.

Exterior Steps:

Repair Criteria	Replacement Criteria
Deteriorated, unsafe and/or uneven surfaces. Repairs shall match existing materials.	Severely deteriorated and unsafe steps.

House Numbers:

Shall be affixed to the structure in accordance with local code and clearly visible from the roadway.



Foundation and Structure

Foundations:

Foundations that are not sound, level, or free from movement shall be addressed on a case-by-case basis.

Structural Walls:

Structural wall concerns that are identified shall be assessed on a case-by-case basis.

Windows and Doors

Interior Doors:

Repair Criteria	Replacement Criteria
Bathroom and bedroom doors that do not operate smoothly and/or have minor defects.	Bathroom and bedroom doors that do not operate smoothly and have major defects shall be replaced a product consistent with the style of existing doors including hardware with locking knob(s).

Exterior Doors [including garage access doors for attached garage]:

Repair Criteria	Replacement Criteria
Exterior doors or Garage access doors that do not operate smoothly, have a non-functioning lock set/dead bolt, have inadequate or damaged weather stripping that does not provide a water/air tight seal, or other minor defects.	Exterior doors or Garage access doors that do not meet current code requirements and/or has major defects. Main entry door shall have a peep hole. All exterior doors shall include deadbolts, keyed to match throughout the home.

Overhead Garage Doors:

Repair Criteria	Replacement Criteria
Garage doors that do not operate smoothly and/or are not weathertight, then repairs shall be made with in-kind materials.	Garage doors that cannot be repaired.

Windows:

Repair Criteria	Replacement Criteria
Windows that have damaged caulking, broken panes, damaged lock sets.	Non-operational, including non-weathertight windows, that are not repairable. All wood frame windows shall be replaced. Replacement windows shall be low e, double pane, double hung, high performance vinyl windows.



Roofing

Flat & Low Slope Roofs:

Repair Criteria	Replacement Criteria
If 10% or less of the surface area of the flat or low sloped roof shows evidence of damage.	Damage of flat or low sloped roofs in excess of 10% of the surface area of the roof shall be replaced. Roofs that are in excess of 15 years shall be replaced.

Pitched Roofs:

Repair Criteria	Replacement Criteria
If 25% or less of the surface area of the pitched roof shows evidence of damage.	Damage of pitched roofs in excess of 25% of the surface area of the roof shall be replaced. All new roofs shall be 30 year architectural shingle with ice and water shield underlayment. All valleys, flashing, drip edges and eave drips shall be replaced with new material. Roofs that are in excess of 15 years shall be replaced.

Soffit & Fascia:

Repair Criteria	Replacement Criteria
Soffit and/or fascia that is missing, damaged, rotted, or non-functioning. Repaired soffit and/fascia shall be repaired with similar materials.	If more than fifty percent of soffit and/or fascia is missing, damaged, rotted, or otherwise non-functioning within each architectural break, then the entirety of the soffit/and fascia should be replaced within that architectural break with similar materials as those on the other exterior sides of the home. If total replacement of fascia is required, the minimum standard will be vinyl or aluminum. If total replacement of soffit is required, the minimum standard shall be vented fiber cement board.

Gutters & Downspouts:

Repair Criteria	Replacement Criteria
Gutters and downspouts that are leaking and gutters that do not collect storm water from all lower roof edges and are otherwise inoperable due to minor defects.	Gutters and downspouts that are inoperable and/or have significant defects or roof systems without gutters and/or downspouts. All replaced gutters shall be Seamless K and downspouts shall be properly connected. Replaced gutters shall be free from debris and function as to move all storm water away from the building and prevent water from entering the structure. Concrete splash blocks shall be installed to move water away from the foundation.



Roof Ventilation:

Repair Criteria	Replacement Criteria
The only roof ventilation component eligible for repair is the gable end vent. Gable end vent repairs apply to up to 10% of the surface area of the vent.	When ventilation codes are not being met, when a continuous run of ridge vent is damaged, and/or a roof is being replaced, a ridge vent ventilation system shall be installed.

Insulation and Ventilation

Insulation:

Repair Criteria	Replacement Criteria
Not applicable	Insulation does not meet current insulation rating requirement(s) or is compromised of its R value shall be replaced. All attic insulation replacement must include baffles as necessary.

Bathroom:

Repair Criteria	Replacement Criteria
Not applicable	Missing or inoperable ventilation systems required to meet code requirement(s). Vent systems must be in close proximity to the shower stall.

Kitchen:

Repair Criteria	Replacement Criteria
None.	Missing or inoperable ventilation systems required to meet code. Replacement may be ductless or ducted to the exterior. Replacement ducts shall avoid roof penetration whenever possible.

Interior Standards

Trim/baseboard/molding

Repair Criteria	Replacement Criteria
If the trim/molding/baseboard on a single wall can be replaced with in-kind material matching the other walls, the damaged section shall be replaced.	Any full-length wall area that has missing or unrepairable trim/molding/baseboard shall be replaced with Xactimate builder grade materials.

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Interior Walls and Ceilings:

Repair Criteria	Replacement Criteria
Any damaged wall or ceiling area must be repaired and finished to match existing finish.	Damaged wood paneling shall be replaced with drywall.

Flooring:

Repair Criteria	Replacement Criteria
Continuous floor spans with no natural break having no more than 10% damage shall be repaired with in-kind material and color, if available.	Unrepairable damaged flooring shall be replaced with 4 mm thick vinyl floor plank or standard grade carpet with padding, based on existing floor type.

Closets:

Repair Criteria	Replacement Criteria
None.	Bedroom closets shall have a minimum of one shelf and a rod. Kitchen pantries shall have three to six shelves. Linen closets shall have three shelves.

Kitchen Cabinets (lower):

Repair Criteria	Replacement Criteria
Damages not involving the structural integrity of the cabinet or of a superficial nature.	Damages that affect the structural integrity of the cabinet or when the upper cabinets are being replaced and cannot be matched to the existing lower cabinet.

Kitchen Cabinets (upper):

Repair Criteria	Replacement Criteria
Damages not involving the structural integrity of the cabinet or of a superficial nature.	Damages that affect the structural integrity of the cabinet or when the upper cabinets are being replaced and cannot be matched to the existing upper cabinet.

Kitchen Countertops:

Repair Criteria	Replacement Criteria
Not applicable	Existing or missing countertops that provide inadequate workspace; countertops and back splash are damaged with large cracks or gouges, or show signs of leaking.

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Bathroom Vanities

Repair Criteria	Replacement Criteria
Damages not involving the structural integrity of the unit or of a superficial nature.	Damages that affect the structural integrity of the unit.

Plumbing

Drain, Waste, Vent Lines:

Repair Criteria	Replacement Criteria
All drain or waste lines with improper or non-functioning trap seals. Waste and vent lines must function without losing the trap seal. Make sure venting is unclogged.	When walls are removed exposing drain, vent and waste lines that are leaking, deteriorated, and non-functioning when repair isn't feasible. Waste and vent lines must function without losing the trap seal. No lines shall have cross connections which permit contamination of water supply or back siphonage between fixtures.

Plumbing Fixtures:

Repair Criteria	Replacement Criteria
Leaking fixtures or those with deteriorated washers. Repair standards shall be appropriate to the presented issue and fixture/equipment type.	Inoperable, broken or missing fixtures.

Water Heaters:

Repair Criteria	Replacement Criteria
Leaking or inoperable water heaters less than seven years in age.	All water heaters less than seven years in age that are unrepairable and all water heaters more than seven years in age. All replaced water heaters shall be tankless.

Water Supply and Distribution Systems:

Repair Criteria	Replacement Criteria
Inoperable shut off valves, leaking or non-functioning fixtures, cracked pipes, and/or lines that do not provide hot or cold water where required.	Inoperable shut off valves, leaking or non-functioning fixtures and/or pipes, and lines that do not provide hot or cold water where required and that cannot be repaired. Lead or galvanized pipes shall be replaced in all circumstances.

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Septic Tanks:

Septic tanks at Damage Assessment, visual signs of damage/issues that are identified will result in a scope of work addition for pump-out and certification as to whether repair or replacement is needed.

Heating, Ventilation, and Air Conditioning

Heat and Air Conditioning:

Repair Criteria	Replacement Criteria
Central air conditioners, split systems, and/or heating systems under ten years in age that have inoperable compressors, fans, or other components that cause an inconsistent internal temperature.	Central air conditioning, split systems, and/or heating systems that cannot be repaired, are over ten years in age, currently operate using an R-22 refrigerant, or are not present. Replaced units shall be properly sized to the dwelling with a minimum of a 15-SEER rating.
Ductwork that shows signs of microbial growth must be cleaned. If cleaning is not feasible, the ductwork must be replaced.	Ductwork that is rusted, shows signs of microbial growth that cannot be cleaned, or shows other signs of being compromised by water, shall be replaced.

Electric

Ground Fault and/or Arc Fault Interrupter Circuits:

Repair Criteria	Replacement Criteria
Not applicable	Non-functioning GFCIs, or when missing from areas required by code.

Electric Distribution:

Repair Criteria	Replacement Criteria
Existing outlets, switches, and fixtures that are inoperable or not flush to wall; inadequate circuit protection; hazardous wiring; ungrounded receptacles; and inadequate number of receptacles.	Existing outlets, switches, and fixtures that are improperly wired, sized, or missing.

Service and Panel:

Repair Criteria	Replacement Criteria
Main service disconnects that are not clearly marked. Service panels that are not securely fastened to the dwelling, have wires with obvious nicks in the insulation, have conductors entering the service that do not have proper connectors, have unsecure terminal attachments, or are not properly bonded.	Main service disconnects that are not accessible. Service panels with significant damage that are non-repairable, and/or repairs that do not meet current code requirements. Federal Pacific panels are to be replaced.



Appliances:

Refrigerator:

Repair Criteria	Replacement Criteria
Not applicable.	Inoperable unit.

Stove:

Repair Criteria	Replacement Criteria
Not applicable.	Inoperable unit.