

REHABILITATION STANDARDS POLICY

County of Humboldt

This Housing Forward - Housing Rehabilitation Standards Policy or RSP is designed to give clear directions to contractors in work write-ups incorporated in rehabilitation contracts. This standard is a guide for specifications which should be applied to produce uniformly safe, decent, durable, and high-performing homes. The Rehabilitation Checklist below is a tool for field inspections that enables inspectors to accurately identify items to include in detailed work write-ups that may become part of contract documents.

This Standard is designed to be used with one- to four-unit dwellings of three stories or less. Some of the standards apply to multifamily properties, but multifamily properties are generally subject to more stringent life-safety and other code requirements, and often have more complex requirements for egress, communal areas, parking, and mechanical systems.

These standards describe the minimum requirements in a variety of ways including:

- Remaining useful life of a component such as a roof.
- The referencing of standards (i.e. ASHRAE 62.2 for ventilation).
- Minimum requirements for the materials used.
- The minimum quantity of a component that is acceptable.
- The requirements of regulatory agencies.
- The requirements of funders such as HUD (CDBG, HOME, NSP) or local governments, including the Environmental Review process (CEQA, NEPA).

The Rehabilitation Standards Policy or RSP contains both a Repair Standard and a Replacement Standard for each category of component listed. The Repair Standard defines how to meet the standard by repairing the respective component. The Replacement Standard defines how to meet the standard when replacing or installing the respective new component. There are limited instances where only one standard applies.

Mission and Housing Values

To eliminate neighborhood blight through renovation and demolition while providing low -income families with safe, secure, and affordable homes.

The ranking of primary considerations from the program's mission is as follows:

- Health and Safety
- Performance and durability
- Life cycle cost
- Affordable operating cost
- Balanced initial cost
- Environmental impact
- Historically sensitive exterior

Applicable Laws and Regulations to construct and maintain homes in full compliance with the following statutory and regulatory requirements and codes:

- HUD Environmental Review
- Building Code: International Residential Code
- Housing Code: The local housing Code
- Federal Housing Code: Housing Quality Standards
- Life Safety Code: Life Safety Code
- HAZMAT: HUD requirements for specific programs
- Energy: 2024 International Energy Conservation Code (IECC)
- Accessibility: ANSI standards for accessibility by disabled residents

- HAZMAT: HUD Guidelines for Lead-Based Paint Hazards
- Building Code: CABO 1-4 Unit Dwelling Code

Please note: Regardless of the standards set forth herein, all housing assisted by HOME monies must meet all applicable State and local codes, ordinances, and requirements, as well as such other requirements HUD may establish. In the absence of State or local building codes, the housing must meet the International Building Code.

For Rental housing, Awardees must produce an estimate, based on age and condition, of the remaining useful life of all major systems, including structural support, roofing, cladding, and weatherproofing, plumbing, electrical, and HVAC.

A capital needs assessment (CNA), prepared no longer than 18 months prior to the date of Application, is required for all multi-family Rental Rehabilitation or Acquisition/Rehabilitation Projects of 26 or more units, and for all Applications in conjunction with Affordable Housing Tax Credits, regardless of the number of units. A CNA may be requested by THE COUNTY for smaller Projects if deemed necessary to properly underwrite the Projects. Capital needs assessments performed for the same Project as a requirement of another funding source will be accepted in lieu of a specific CNA for the HOME Application.

Capital Needs Assessment (CNA) means a qualified professional's opinion of a property's current physical condition determined after a physical inspection of the interior and exterior of the units and structures. The physical inspection should include an interview with the onsite manager and maintenance personnel. This assessment should identify deferred maintenance, physical needs, remaining useful life, material building code violations that affect the property use, structural and mechanical integrity, and the future physical and financial needs. The assessment must include the cost of labor and materials identified in detail and the extent of future expenditures contemplated to ensure the costs will be addressed through operating and replacement reserves. Components which should be examined and analyzed in this assessment include but are not limited to:

- Site, including topography, drainage, pavement, curbing, sidewalks, parking, landscaping, amenities, water, sewer, storm drainage, gas, and electric utility lines.
- Structural systems, both substructure and superstructure, including exterior walls and balconies, exterior doors and windows, roofing system and drainage.
- Interiors, including unit and communal area finishes (carpeting, vinyl or tile flooring, plaster walls, paint condition, etc.), unit kitchen finishes, cabinets and appliances, unit bathroom finishes and fixtures, and communal area lobbies and corridors; and
- Mechanical systems, including plumbing and domestic hot water, HVAC, electrical, lighting fixtures, fire protection, and elevators.

In all cases, if the remaining useful life of one or more major systems is less than the Period of Affordability, the Awardee must establish and maintain a replacement reserve and make adequate monthly payments thereto, such that there are sufficient funds to repair or replace systems as needed.

Upon completion of a rehabilitation each of the major systems must have a minimum useful life of five years, or the major systems must be rehabilitated or replaced as a part of the rehabilitation work.

If the housing is occupied at the time of rehabilitation, Awardees must identify any life-threatening deficiencies, pursuant to the Uniform Physical Condition Standards (UPCS), are highlighted in orange on Attachment A, which contains the complete list of inspectable items.

The County will review and approve all written cost estimates and ensure that construction contracts and work performed will meet Rehabilitation Standards. In addition, the County will conduct initial, progress and final inspections to ensure that all work is done in accordance with work write-ups.

I. PURPOSE OF STANDARDS

A. The Rehabilitation Standards Policy (known herein as the “RSP”) is designed to outline the requirements for building rehabilitation for all single and multi-family housing projects in the County of Humboldt.

B. The goal of the County’s Housing Forward Program is to provide functional, safe, affordable, and durable housing that meets the needs of the tenants and communities in which the housing is located. The purpose of the RSP is to ensure that property rehabilitation puts each building in the best possible position to meet this goal over its extended life and that, at a minimum, all health and safety deficiencies are addressed.

C. If a project is out of compliance with the RSP, the Awardee shall bring to the attention of County staff the specific portion of the project which does not comply, stating the reasons for non-compliance. Staff will make a determination as to whether an exception to the RSP should be granted.

II. QUALITY OF WORK

A. Awardees and developers shall ensure that all rehabilitation work is completed in a thorough and workmanlike manner in accordance with industry practice and contractually agreed upon plans and specifications as well as subsequent mutually agreed upon change orders during the construction process. Awardees and developers will employ best practice industry standards relating to quality assurance to verify all work completed.

B. By meeting the various code requirements as a minimum standard, together with the other standards herein or in attendant County policies, each building rehabilitation project is assured to be brought up to an acceptable level of rehabilitation.

C. Warranties shall be required per the standard construction contracts on all materials, equipment, and workmanship.

III. CODE COMPLIANCE

A. All work shall comply with all applicable California State and local codes, ordinances, and zoning requirements.

B. Please note that Awardees must demonstrate compliance with all State and local codes through project affiliation with professional design team drawing certifications (e.g. architectural design stamp) and/or other approved methods such as State inspector certification.

C. The RSP is designed to meet or exceed the Uniform Physical Condition Standards (UPCS) and ensure that upon completion, units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. See Attachment A for a list of Inspectable Items and Observable Deficiencies, including descriptions of the type and degree of deficiency for each item that any project must address, at a minimum.

IV. HEALTH AND SAFETY

A. If the housing is occupied at the time of rehabilitation, any life-threatening deficiencies must be identified and addressed immediately. See Attachment A for a list of Inspectable Items and Observable Deficiencies, including the identification of life-threatening deficiencies (highlighted in orange) for the property site, building exterior, building systems, communal areas, and units.

V. SCOPE OF WORK DETERMINATION

A. In developing scopes of work, Awardees and developers will work with the County to ensure that all requirements under the RSP are satisfied and that the proposed scope of work meets the goals above. The County's approval for all scopes of work is required in accordance with standard practices.

VI. EXPECTED USEFUL LIFE

- A. In developing scopes of work on housing rehabilitation projects, The County and developers will consider the remaining expected useful life of all building components with regard to building long-term sustainability and performance. Specifically, each building component with a remaining expected useful life of less than the applicable period of affordability (15 years) shall be considered for replacement, repair or otherwise updated. Additionally, new building components with an expected useful life of less than 15 years shall be considered for future replacement.
- B. Staff will underwrite the proposed project to determine if sufficient replacement reserves will be set aside each month to cover the full cost of any such replacement, repair, or update. Whether or not a particular building component has been replaced, repaired, or otherwise updated as part of the rehabilitation scope of work, all building components and major systems must demonstrate adequate funding to be viable throughout the 15-year affordability period.

VII. DISASTER MITIGATION

A. To the extent applicable/relevant, the housing must be improved to mitigate the impact of potential disasters (e.g. earthquakes, tornadoes, floods, wildfires) in accordance with State or local codes, ordinances, and requirements, or such other requirements that HUD may establish. The relevant State codes are the International Residential Code of 2022, as amended, for new construction and the International Building Code for rehabilitation.

B. In addition, construction of the housing must adhere to the California Standard Hazard Mitigation Plan adopted in 2018.

VIII. ENERGY CONSERVATION

- A. Equipment, appliances, windows, doors, and appurtenances replaced during rehabilitation shall be replaced with Energy Star qualified products.
- B. If feasible, attics should be insulated to R38 and walls to a minimum of R11.
- C. Replacement heating and/or cooling systems shall be properly sized as evidenced by completion of ACCA/ANSI Manual J® or an equivalent sizing calculation tool.
- D. All accessible air ducts shall be tightly sealed.
- E. Heating or cooling supplies running through unconditioned space should be avoided or rerouted, if possible, but when present and accessible, should be insulated.

IX. ACCESSIBILITY REQUIREMENTS

- A. Housing that is rehabilitated must meet all applicable federal and State regulations regarding accessibility for persons with disabilities. The applicability of these rules is complex and therefore it is recommended that developers seeking funds consult with a qualified design professional.
- B. Projects shall comply with other standards as may apply or be required by funding sources (i.e. USDA Rural Development)
- C. Projects, if applicable, shall comply with Section 504 of the Rehabilitation Act of 1973

implemented at 24 CFR Part 8 a. For “substantial” rehabilitation (projects with 15 or more total units and the cost of rehabilitation is 75% or more of the replacement cost): i.e. At least 5% of the units (1 minimum) must be made fully accessible for persons with mobility impairments based on the Uniform Federal Accessibility Standards (UFAS) ii. In addition, at least 2% of the units (1 additional unit minimum) must be made accessible for persons with sensory impairments. iii. Common spaces must be made accessible to the greatest extent feasible

D. For projects with “less-than-substantial” rehabilitation (anything less than “substantial”), the project must be made accessible to the greatest extent feasible until 5% of the units are physically accessible, and common spaces should be made accessible as much as possible.

X. REHABILITATION CONSTRUCTION STANDARDS

A. SITE

1. General:

- a. Assure that the site is safe, clean, and usable, and designed with details, assemblies, and materials to provide ongoing durability without undue future maintenance.
- b. Site design and engineering shall be by a licensed professional civil engineer, or other qualified professional.
- c. Design and systems shall conform to all applicable codes, rules, and regulations:
 - i. Local and municipal zoning.
 - ii. NFPA Codes as they may apply.

2. Sprinkler water service – Underground water service as required for building the sprinkler system shall be in accordance with NFPA 24.

3. Drainage – ensure that the grading surrounding the building will slope away from the building and drain properly, without ponding or erosion.

4. Sewer connections to municipal sewage systems and on-site sewage disposal:

- a. Existing sewer laterals that are to be reused should be evaluated to assure that they are serviceable and have a remaining useful life of 15 years or are covered by a plan to repair or replace during the 15-year affordability period.
- b. New systems are designed to conform to the State codes and regulations.

5. Water service:

- a. Existing municipal water supplies to buildings shall be evaluated to assure that they are serviceable, of adequate capacity and have a remaining useful life of 15 years or are covered by a plan to repair or replace during the 15-year affordability period.
- b. Required new systems shall be designed to conform to State codes and regulations.

6. Vehicular access to public way – site design shall conform to local zoning and regulations, as well as be sensible in its layout to maximize vehicular and pedestrian safety.

7. On-site Parking – parking shall be adequate for project type, meet local codes, and be designed to drain well, with a durable appropriate surface material. Handicapped parking shall be provided as required.

8. Pedestrian access and hardscape – In general, paved walkways within the site will be designed to provide sensible pedestrian access from the public way into the site, from parking areas, and provide access to buildings. All walkways should generally conform to applicable codes for width and slopes and fall protection. Site stairs shall be safe, constructed of durable materials, with proper rise and run, and with code approved railings as required. Accessible routes into buildings shall be provided as required by code.

9. Site amenities – site amenities may be provided which enhance the livability of the project including playground areas, seating, benches, patio areas, picnic tables, bike racks, grills, and fencing, etc.

10. Mailboxes - Provision will be made for USPS-approved cluster mailbox units if required.

11. Landscaping – lawns, ground cover, planting beds, perennial plants, shrubs, and trees may be provided to enhance the livability, and to provide a positive aesthetic sense. a. Planting choices specified should be low-maintenance, non-invasive species, of an appropriate size and scale and located, when adjacent to building structures, with regard to their size at maturity.

12. Solid waste collection & storage – if necessary, provision shall be made for the outdoor storage

and collection of solid waste and recycling materials in receptacles (dumpsters, wheeled trash cans, totes). Enclosures should be accessible as required by the code.

13. Site lighting with shielded fixtures may be provided to illuminate parking and pedestrian walkways and will conform to local zoning.

14. Fuel Storage – On site outdoor placement and storage of fuels per applicable regulations.

15. Underground or overhead utilities – as regulated by code and utility rules.

B. FOUNDATIONS

1. A qualified professional shall examine existing foundations.

a. Foundations to be adequately sized, free of broken components or deterioration which may compromise the load bearing structural integrity.

b. Design and implement structural reinforcements or reconstruction as necessary.

2. Above-grade masonry unit block or brick shall be reasonably stable, plumb, and sound with no missing units or voids.

3. Pointing of mortar joints shall be specified as necessary to assure the continued integrity of the structural assembly.

4. New below-grade structures to conform to Chapter 18 of IBC as appropriate.

C. MASONRY COMPONENTS

1. Buildings with masonry bearing walls shall be examined for their structural integrity. Existing masonry building components shall be examined to assure sound condition and repaired as necessary to provide the load-bearing capacity, resistance to water penetration, and aesthetic quality to assure the assemblies will perform for the purpose intended.

a. Masonry shall be plumb, and structurally sound.

2. Repair or replace deteriorated portions or missing units.

a. a. Brick veneer shall be sound or repaired to be sound.

3. Masonry mortar joints shall be sound, and free of loose or deteriorated mortar, with no voids.

a. Pointing of mortar joints shall be specified as necessary to assure the continued integrity of the structural assembly and prevent water intrusion.

4. Historic masonry designated to remain shall be restored to sound serviceable condition, and in accordance with Section 106 of National Historic Preservation Act.

a. Where masonry is considered historic, repairs will be carried out utilizing the Secretary of the Interior's "Standards of Rehabilitation" and related NPS Preservation Briefs for "Repointing Mortar Joints on Historic Masonry Buildings."

5. Chimneys

a. Assure structural integrity, reconstruct, and point as necessary using earthquake codes.

b. If used for fuel heating appliances – provide lining as may be required by code and as prescribed by the heating appliance manufacturer.

D. STRUCTURE

1. A qualified professional shall examine each building's load bearing structure and assess its existing condition to determine suitability of continued use.

2. In general, structure evaluation and design shall be in conformance with IBC, Chapter 16.

a. In most residential rehab projects where there is no change in use, it is not expected that the structure will be brought up to new construction standards.

b. Consideration shall be given if there were any proposed changes in use which would impact on the historical loading.

3. Deficiencies identified shall be addressed and repairs designed and specified as necessary to correct such conditions:

a. Repairs shall be made to any deteriorated load-bearing structural elements.

b. Reinforce, install supplemental or replace structural members determined not to be adequate for use.

E. ENCLOSURE – SHELL

1. Roofing

- a. Existing:
 - i. Examine existing roofing and flashing systems to determine suitability for continued use. Continued life expectancy of existing roofing should be a minimum of 15 years or covered by a plan to repair or replace during 15-year affordability period.
 - ii. Repair existing roofing as required.
 - iii. Existing historical slate roofs shall be repaired in accordance with the Secretary of the Interior's "Standards for Rehabilitation."
 - b. New Roofing
 - i. New roofing shall be installed where existing roofing does not meet requirements for continued use.
 - ii. New roofing system components shall be compatible, and include - the nail base, the underlayment layer, ice & water shield self-adhesive membrane flashings, metal flashings and roofing.
 - Strip existing roofing and dispose of it properly.
 - Examine exposed existing substrate for structural soundness.
 - Install new roofing system per code and per NCRA trade practices, and manufacturer specifications.
 - Flashings – deteriorated flashings shall be replaced, and the weatherproof integrity of the roof system shall be assured.
 - c. Ventilation
 - i. Roof assemblies shall be properly ventilated in accordance with applicable code requirements, and appropriate building science detailing.
2. Exterior Finishes
- a. Wood Siding –
 - i. Examine existing siding for soundness – shall be free of major cracks, rot, and other deterioration which may compromise its useful life and be suitable to hold exterior paint.
 - ii. Siding shall be free of gaps and holes and provide a continuous weatherproof system.
 - iii. Repair or re-side as necessary to provide a weather resistant enclosure.
 - iv. Replace existing wood siding on historic buildings as necessary in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
 - b. Masonry -
 - i. Masonry bearing walls and veneers shall be restored as necessary. All work on historic masonry shall be done in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
 - c. Other existing cladding system types and materials shall be repaired and/or restored in-kind with matching or similar materials to provide a durable weather resistant enclosure.
3. Trim – Exterior trim and architectural woodwork.
- a. Existing wood trim:
 - i. Existing trim to remain must be sound, free of defects and deterioration which compromises its use.
 - ii. Repair and restore trim to usable condition. Patch or replace in kind any deteriorated wood trim components.
 - iii. Repair of historic woodwork and trims shall be in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
 - b. New wood trim shall be installed in a workmanlike manner. Reference may be made to Architectural Woodwork Institute (AWI) standards.
 - c. Other trim materials which are suitable may be used as appropriate and shall be installed per manufacturer's recommendations.
 - d. Trim which is part of the weather tight enclosure shall be flashed or caulked with joint sealers as necessary to prevent water intrusion.
4. Paint
- a. In general, all existing exterior wood surfaces shall receive new paint coatings, except as appropriate due to the recent application of paint and/or the sound condition of existing coatings.
 - b. Examine surfaces and apply paint only to sound acceptable materials / surfaces.
 - i. Prepare surfaces properly, removing loose or peeling previous paint.
 - ii. Paint prep shall be done in accordance with applicable lead safe standards.

- c. Before painting, be sure that any moisture issues which may compromise the life expectancy of the paint system are remedied.
- d. Exterior paint systems shall be compatible and installed in accordance with manufacturers' specifications.

5. Porches, decks and steps

- i. Existing porches, decks, steps, and railings proposed to remain shall be examined and repaired as necessary. Repair and reconstruction shall be carried out to assure that they will have a continued useful life of 15 years or covered by a plan to repair or reconstruct during the 15-year affordability period.
 - ii. Inspect structure for soundness and reconstruct any deteriorated members as required.
 - iii. Installation of newer support piers may be required.
 - iv. Patch existing decking with matching materials or install new durable decking.
- b. Railings
- i. shall be sound and adequately fastened to meet code requirements for structural loading. Repair or replace in kind as appropriate.
 - ii. Shall meet code requirements for height of protective guards, or have supplemental guards installed.
- c. Steps shall be safe and meet applicable codes, with railings as necessary.
- d. Historic porches designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
- e. All porch elements shall be able to withstand the weather elements to prevent premature deterioration.

F. ACOUSTICAL TREATMENTS

1. Dwelling units separated acoustically using Chapter 1207 of IBC as a minimum standard.

G. DOORS

1. General

- a. Doors to meet code requirements of NFPA 101, Chapters 7.2, 8.3, 30.3.6.2 & 30.2.2.2
- b. Meet egress requirements for dimensions, swing, and clearances, and be accessibility compliant as required.
- c. Be sound and secure.
- d. New doors shall be installed per manufacturers' recommendations and standard trade practice standards.
- e. Flash properly and have shim spaces insulated.
- f. Existing doors to remain should be examined and determined to be suitable for reuse with a remaining life after restoration of 15 years or covered by a plan to repair or replace during the 15-year affordability period.
 - i. Restore as required to provide useful life.
 - ii. Shall be tested and modified as necessary to operate properly.
 - iii. Install new weather stripping and sweeps to provide seal against weather elements and air infiltration.
 - iv. Historic doors designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.

2. Unit doors

- a. Unit entry doors shall be fire-rated as required.

3. Other doors – Access doors shall meet code requirements for fire rating.

4. Door hardware shall operate properly, be secure and shall meet accessibility standards and NFPA 101, Chapters 7.2, 8.3, 30.3.6.2 & 30.2.2.2.

H. WINDOWS

1. Windows shall be of legal egress size when required by code.

- a. In townhouse units, existing windows which are non-conforming egress size shall be reviewed for code compliance.

2. Existing windows:

- a. Existing windows to remain should be examined and determined to be suitable for reuse with a reasonable remaining life after restoration of 15 years without undue future maintenance or covered by a plan to maintain or replace during the 15-year affordability period.
- b. Capable of providing adequate seal against air infiltration, weather elements, and be determined to be appropriately energy efficient in keeping with the overall energy efficiency strategy of the project.
- c. Install new weather stripping to provide seal against weather elements and air infiltration.
- d. Air seal shim spaces and window weight pockets if possible.
- e. Restore and modify as required to provide useful life.
- f. Shall be tested and modified as necessary to operate smoothly and properly per code.
- g. Historic windows designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
- h. Hardware shall be intact and operational or be replaced with new hardware as required.

3. New Windows:

- a. Where existing windows do not meet the standards for egress, condition, and/or energy efficiency deemed appropriate to the project, they shall be replaced by new windows.
- b. New windows shall be code compliant. Developers are encouraged to consider upgrading to Tier II level by providing R-5 windows.
- c. Additionally, new window units should be tested assemblies meeting ASTM standards for water penetration & air leakage.
- d. All windows shall be installed per manufacturer's installation guidelines and specifications, and shall incorporate appropriate detail, flashings, joint sealers, and air sealing techniques.

I. INTERIOR FINISHES

1. In general, all interior finishes will be new and installed per manufacturer's recommendations and the standards of quality construction per trade practices and associations related to the particular product or trade.

2. Walls & ceilings

- a. Where existing finishes are proposed to remain, they will be determined to meet the standard of being sound, durable, lead-safe, and have a remaining useful life of no less than 15 years or covered by a plan to repair or replace during the 15-year affordability period.

3. Flooring

- a. Existing wood flooring in good condition should be repaired, sanded, and refinished.
- b. All new flooring materials (resilient flooring, wood flooring, laminate flooring, carpet, and/or ceramic tile) shall be installed over suitable substrates per manufacturer's specs and the trade association practices.

4. Trim - Wood trim and architectural woodwork.

- a. Existing trim shall be repaired and restored to usable condition, free of deterioration which compromises its use. Repair of historic woodwork & trims shall be in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
- b. New wood trim shall be installed in a workmanlike manner.

5. Paint - In general, all interior ceiling, wall, and trim surfaces shall receive renewed coatings of paint (or other clear/stain) finishes. Painting shall be done in a workmanlike manner, and in accordance with the manufacturer's recommendations. All preparation of existing surfaces shall be done in a lead-safe manner.

J. SPECIALTIES

1. Toilet accessories – each bath will have appropriate accessories such as towel bars, robe hooks, bath tissue holders, etc., installed and securely fastened in place. Accessories shall be located per accessibility requirements where necessary.
2. Medicine cabinets and mirrors – installed in each unit bath as appropriate.
3. Signage and identification – building signage shall be provided as appropriate: a. Including building address 911 #'s, units' identification, building directory, exits, stairways, common and utility spaces, etc. shall be in conformance with NFPA 101 Life Safety Code, and be accessibility

compliant and 911 approved.

4. Exit signage will be provided as required by the code and be accessibility compliant as required.
5. Fire protection specialties – provide fire extinguishers in buildings, and in units as required by code and/or by State or local fire authorities. Locate as directed by authorities.
6. Shelving – provide durable, cleanable shelving for pantries, linen closets, clothes closets, and other storage as appropriate, securely fastened in place.

K. EQUIPMENT

1. All new equipment to be ENERGY STAR® rated.
2. Existing equipment to be retained and continued to be used shall be in serviceable condition with an expected useful life of 15 years or covered by a plan to replace during the 15-year affordability period.
3. Kitchen appliances –
 - a. provide a new stove and refrigerator in each unit.
 - b. Existing appliances to be reused shall be in good and serviceable condition.
 - c. Provide other appliances (such as microwaves) as may be appropriate to the project.
 - d. All appliances in accessible unit units shall be accessibility compliant and located in an arrangement providing the required clear floor spaces.
4. Laundry –where adequate space is available and when appropriate to meet the project goals, washers and dryers may be provided in laundry rooms or in units.
 - a. Heat pump dryers are encouraged where appropriate and readily available.
 - b. Where a project is served by natural gas, consideration of the use of natural gas dryers is encouraged. In projects not served by natural gas, propane fired dryers should be considered for cost of operation reasons where feasible and appropriate.
5. Solid waste handling – Provide trash and recycling receptacles as appropriate to enable the tenants and property management staff to handle and store solid waste.
6. Playground equipment – Provide safe, code-approved new playground equipment if a playground is appropriate to the project.

L. FURNISHINGS – CASEWORK

1. Kitchen cabinetry and counters
 - a. The existing cabinetry and/or countertops proposed to remain shall be in good condition with a remaining useful life of 15 years or covered by a plan to restore or replace during the 15-year affordability period.
 - b. New cabinetry
 - i. shall be of good-quality, meeting ANSI/KCMA A161.1-2012 “Performance & Construction Standards for Kitchen Cabinetry and Bath Vanities” standards. Other industry standards for cabinetry may be used as guidelines, such as the Kitchen Cabinet Manufacturer’s Association (KCMA) “Severe Use Specification – 2024,” the Architectural Woodwork Institute’s (AWI) Woodwork Standards and Cabinet Fabrication Handbook.
 - ii. New counters shall be provided with a cleanable sanitary surface material impervious to water such as high-pressure laminate (HPL).
 - Shop fabricated as one-piece assembly where possible. Seal field joints.
 - Installed level and securely fastened to cabinetry.
2. Bath cabinetry and counters – vanity lavatory tops, when used, should be one-piece integral bowl with integral backsplash.

M. ASBESTOS REMOVAL

1. Project will be assessed for the existence of asbestos-containing building materials by qualified professionals:
 - i. National Emission Standards for Hazardous Air Pollutants (NESHAP) apply.
 - ii. Removal of asbestos shall be carried out per Federal EPA and State regulations and rules.

N. LEAD-BASED PAINT

As required under 24 CFR Part 35, the Final HUD Regulation on Lead-Based Paint Hazards in

Federally Owned Housing and Housing Receiving Federal Assistance, all assisted dwelling units constructed before January 1, 1978, will be evaluated for lead-based paint hazards, or presumed to have lead-based paint present throughout the unit when paint is disturbed.

- A qualified, certified, or licensed person will do evaluation as required under the regulation.
- All lead-based paint hazards will be identified and reduced or eliminated through paint stabilization, interim controls or abatement with work being done by supervised, trained, qualified, certified, or licensed persons as required under the regulation.
- Safe work practices will be followed at all times.
- Occupants shall be protected or temporarily relocated as required by the regulation. With some exceptions, as listed at 24 CFR 35.1345, occupants shall be temporarily relocated before and during hazard reduction activities to a suitable, decent, safe, and similarly accessible dwelling unit that does not have lead hazards.
- The dwelling unit and worksite shall be secured. The worksite shall be prepared, and warning signs shall be posted as required by the regulation.
- Clearance examinations will be performed by qualified personnel and final clearance shall be cleared by DEQ certified personnel.

O. CONVEYANCE SYSTEMS

1. Elevators may be installed when appropriate and possible, when such elevator is part of the project's program goals, or as required by code, as follows:

- a. Installed per code NFPA 101, Chapter 9.4
- b. ASME 17.1 Safety Code for Elevators - 2013

2. Existing elevators and lifts may be retained if they are appropriate to the use of the building and in serviceable condition with an expected useful life of 15 years or covered by a plan to maintain or replace during the 15-year affordability period and approved by agencies having jurisdiction.

P. MECHANICAL

1. General:

- a. A mechanical engineer or other qualified professional shall design all mechanical systems.
- b. All mechanical systems shall meet all applicable codes.

2. Fire Protection

a. In general, all buildings assisted with HOME funds shall have fire suppression as required by applicable codes with approved sprinkler systems installed as required by NFPA 101 and NFPA 1:

- i. System design to conform to applicable NFPA standard 13 or 13R.
- ii. System installed by State approved persons.
- iii. Underground water services for sprinkler system shall meet NFPA 24
- iv. Provide fire pumps, standpipes, and fire department connection as required per NFPA 13, 14 & 25.

b. Where possible, piping for the sprinkler system shall be concealed.

3. Plumbing

a. Where existing components of a system are to be reused, they will be examined and determined to be in good condition, code compliant and have a remaining useful life of a minimum of 15 years or covered by a plan to repair or replace during the 15-year affordability period. Substandard or critical non-code compliant components shall be replaced.

b. Use water-saving shower heads and faucet aerators.

c. All fixtures, piping fittings and equipment shall be lead-free.

d. Kitchen fixtures – When existing kitchen fixtures are not reused in accordance with a. above, new sinks and faucets, and associated plumbing shall be installed in each unit.

e. Bath fixtures – When existing bath fixtures are not reused in accordance with a. above, new toilets, tubs and tub surrounds, lavatory sinks, and faucets shall be installed in each unit.

- i. Three and four-bedroom units are encouraged to be designed to include 1½ baths minimum where adequate space is available.

f. Provision for laundry rooms or laundry hook-ups may be made per project's program requirements.

g. Provision for other utility plumbing for janitor sinks, floor drains, outdoor faucets, drains for dehumidification systems, etc., may be made as desired or required.

4. Heating System design:
 - a. where existing components of a system are proposed to be reused, they will be examined and determined to be in good and serviceable condition, code compliant and have a remaining useful life of a minimum of 15 years or covered by a plan to repair or replace during the 15-year affordability period.
 - b. Temperature control - The temperature in each unit shall be individually thermostatically controlled.
 - c. Provide adequate heat in common spaces.
 - d. Install pipe insulation with minimum 1.5" wall thickness.
5. Ventilation
 - a. Code-compliant indoor air quality will be addressed by the installation of either exhaust only or balanced (heat recovery) ventilation systems as required by: Fire protection of system ducts per NFPA 101, Chapter 9.2
 - b. Balanced mechanical ventilation systems are encouraged.
 - c. Ventilation controls shall be per applicable codes.
6. Domestic Hot Water:
 - a. System shall be designed as required for efficiency.
 - b. Install pipe insulation per code.

Q. ELECTRICAL

1. Project electrical design should be done by a licensed electrical engineer, or other qualified professional.
2. Project electrical must be installed by a licensed electrician.
3. Design shall comply with all the applicable codes:
 - a. California State and local fire codes.
 - b. NFPA 101, Life Safety Code
 - c. NFPA 70, National Electrical Code, 2011 Edition
 - d. NFPA 72, National Fire Alarm and Signaling Code
 - e. NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection
4. In general, the electrical system should be new throughout a building:
 - a. Where existing service entrances, disconnects, meters, distribution wiring, panels, and devices are proposed to remain, they will be examined and determined to be in good condition, code compliant and have a remaining useful life of a minimum of 15 years, or covered by a plan to repair or replace during the 15-year affordability period. The designer, in concert with the State electrical inspector, shall examine the system and equipment. Existing components of the electrical system may be reused as appropriate. Substandard or critical non-code compliant components shall be replaced.
5. Utility connections shall be installed per the rules and regulations of the electrical utility.
6. Electrical service and metering:
 - a. The service entrance size shall be calculated to handle the proposed electrical loads.
 - b. Metering and disconnects shall be per code and mounted at approved locations.
7. Elevator wiring shall conform to the ANSI 17.1 as modified by State or local codes.
8. Electrical distribution system:
 - a. Lighting and receptacle circuits shall be designed per code.
 - b. Locations and layout of devices and lighting to be logical and accessibility compliant where required.
 - c. Provision shall be made for the wiring of dedicated equipment circuits and connections for heating, ventilation equipment/exhaust fans, pumps, appliances, etc.
9. Artificial Lighting shall be provided using IBC 1205 as a minimum guideline. Developers are encouraged to upgrade to Energy Star® Category.
10. Site lighting with shielded fixtures may be provided to illuminate parking and pedestrian walkways and will conform to local zoning.
11. Emergency and exit lighting/illuminated signage shall be per the NFPA 101, Life Safety Code.

Attachment A: Uniform Physical Condition Standards for Housing Rehabilitation

NOTE: Deficiencies highlighted in orange are life-threatening and must be addressed immediately if the housing is occupied.

REQUIREMENTS for SITE

Inspectable Item	Observable Deficiency	Type of Deficiency that must be addressed
Fencing and Gates	Damaged/Falling/Leaning Fencing on property lines is preferred. If repairs are needed, replacing sections in kind is permissible if the budget permits.	<i>Fence or gate is missing or damaged to the point it does not function as it should</i>
	Holes	<i>Hole in fence or gate is larger than 6 inches by 6 inches</i>
	Missing Sections	<i>An exterior fence, security fence or gate is missing a section which could threaten safety or security</i>
Grounds	Erosion/Rutting Areas	<i>Runoff has extensively displaced soils which has caused visible damage or potential failure to adjoining structures or threatens the safety of pedestrians or makes the grounds unusable</i>
	Overgrown/Penetrating Vegetation	<i>Vegetation has visibly damaged a component, area or system of the property or has made them unusable or unpassable</i>
	Trees that are dead, dying, or hazardous will be removed. Removal will include cutting close to the ground, grinding of the stump to 12 inches below the finished grade, installation of topsoil and re-seeding.	<i>Replacement of trees and shrubs are permitted if economically feasible and must be selected from the State Extension Service list of local, drought-resistant, and non-invasive plant materials. In placement of trees, attention should be paid to shading the house to reduce air conditioning costs. Also, trees should be located a sufficient distance from foundations, sidewalls, walkways, driveways, patios, and sidewalks in order to avoid future damage from root growth and branches brushing against the structure. Setbacks from structures should typically exceed half of the canopy diameter of a full-grown example of the species.</i>
	Ponding/Site Drainage	<i>There is an accumulation of more than 5 inches deep and/or a large section of the grounds-more than 20%-is unusable for its intended purpose due to poor drainage or ponding</i>
	Bare section of lawn will be reseeded with State Extension Service-recommended, drought-resistant varieties such as Tall Fescue.	<i>Wholesale replacement of lawn grasses is not allowed, overseeding is permitted with State Extension Service-recommended, drought-resistant varieties such as Tall Fescue.</i>
Health & Safety	Air Quality - Sewer Odor Detected	<i>Sewer odors that could pose a health risk if inhaled for prolonged periods</i>
	Air Quality - Propane/Natural Gas/Methane Gas Detected	<i>Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled</i>
	Electrical Hazards - Exposed Wires/Open Panels	<i>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</i>
	Electrical Hazards - Water Leaks on/near Electrical Equipment	<i>Any water leaking, puddling, or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution, or explosion</i>
	Flammable Materials - Improperly Stored	<i>Flammable materials are improperly stored, causing the potential risk of fire or explosion</i>
	Garbage and Debris - Outdoors	<i>Too much garbage has gathered-more than the planned storage capacity, or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Hazards - Other	<i>Any general defects or hazards that pose risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Any physical defect that could cause cutting or breaking of human skin or other bodily harm</i>
	Hazards - Tripping	<i>Any physical defect in walkways or other travelled area that poses a tripping risk</i>
	Infestation - Insects	<i>Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk</i>
	Infestation - Rats/Mice/Vermin	<i>Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk</i>

Mailboxes/Project Signs	Mailbox Missing/Damaged	<i>Mailbox cannot be locked or is missing</i>
	Signs Damaged	<i>The project sign is not legible or readable because of deterioration or damage</i>
Parking Lots/Driveways/Roads	Cracks	<i>Cracks that are large enough to affect traffic ability over more than 5% of the property's parking lots/driveways/roads or pose a safety hazard</i>
	Ponding	<i>3 inches or more of water has accumulated making 5% or more of a parking lot/driveway unusable or unsafe</i>
	Potholes/Loose Material	<i>Potholes or loose material that have made a parking lot/driveway unusable/unpassable for vehicles and/or pedestrians or could cause tripping or falling</i>
	Settlement/Heaving	<i>Settlement/heaving has made a parking lot/driveway unusable/unpassable or creates unsafe conditions for pedestrians and vehicles</i>
Play Areas and Equipment	Damaged/Broken Equipment	<i>More than 20% of the equipment is broken or does not operate as it should or any item that poses a safety risk</i>
	Deteriorated Play Area Surface	<i>More than 20% of the play surface area shows deterioration or the play surface area could cause tripping or falling and thus poses a safety risk</i>
Refuse Disposal	Broken/Damaged Enclosure-Inadequate Outside Storage Space	<i>A single wall or gate of the enclosure has collapsed or is leaning and in danger of falling or trash cannot be stored in the designated area because it is too small to store refuse until disposal</i>
Retaining Walls	Damaged/Falling/Leaning	<i>A retaining wall is damaged and does not function as it should or is a safety risk</i>
Storm Drainage	Damaged/Obstructed	<i>The system is partially or fully blocked by a large quantity of debris, causing backup into adjacent areas or runoffs into areas where runoff is not intended</i>
Walkways/Steps/Paving	Broken/Missing Hand Railing	<i>The handrail is missing, damaged, loose or otherwise unusable</i>
	Cracks/Settlement/Heaving Essential paving, such as front sidewalks and driveways with minor defects, will be repaired to match. Tripping hazards greater than 3/4" must be addressed. Non-essential, highly deteriorated paving, such as sidewalks that are unnecessary, will be removed and appropriately landscaped.	<i>Cracks, hinging/tilting or missing sections that affect traffic ability over more than 5% of the property's walkways/steps or any defect that creates a tripping or falling hazard. Unrepairable essential walks and driveways will be replaced with permeable paving when financially feasible or concrete per City Ordinance. Wood-framed, handicapped-accessible ramps are an eligible expense.</i>
	Spalling/Exposed rebar	<i>More than 5% of walkways have large areas of spalling--larger than 4 inches by 4 inches--that affects traffic ability</i>
Grading	All grading adjacent to the building and for a distance of at least 10 feet away from the building will slope away from the structure at a pitch of at least 1 inch per foot. All bare earth will be reseeded, or sod will be installed to cover.	
Out Buildings	Unsafe and blighted structures, including outbuildings, will be removed if it is not financially feasible to complete the repairs required to make them structurally sound, leak-free, with lead hazards stabilized. Detached garages should have operable and lockable doors and windows.	<i>NO outbuilding replacement is permitted in this program.</i>
Requirements for Building Exterior		
Cladding	Siding and trim will be intact and weatherproof. All exterior wood components will have a minimum of one continuous coat of paint, and no exterior painted surface will have any deteriorated paint. Buildings designated as historic will have existing wood siding repaired in kind. New	<i>Buildings not designated as historic may have siding replaced with vinyl siding to match the existing configuration. CertainTeed, Mastic, and Wolverine brands are approved. If replaced, soffit material will be vented/perforated vinyl. New wood components will be FSC certified.</i>

	exterior wood will blend with existing and will be spot-primed and top-coated in a lead-safe manner.	
Doors	Damaged Frames/Threshold/Lintels/Trim	<i>Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel, or trim</i>
	Damaged Hardware/Locks	<i>Any door that does not function as it should or cannot be locked because of damage to the door's hardware</i>
	Damaged Surface (Holes/Paint/Rusting/Glass)	<i>Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass</i>
	Damaged/Missing Screen/Storm/Security Door	<i>Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing</i>
	Deteriorated/Missing Caulking/Seals	<i>The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should</i>
	Missing Door	<i>Any exterior door that is missing</i>
Fire Escapes	Blocked Egress/Ladders	<i>Stored items or other barriers restrict or block people from exiting</i>
	Visibly Missing Components	<i>Any of the functional components that affect the function of the fire escape--one section of a ladder or railing, for example--are missing</i>
Foundations	Cracks/Gaps	<i>Large cracks in foundation more than 3/8 inches wide by 3/8 inches deep by 6 inches long that present a possible sign of a serious structural problem, or opportunity for water penetration or sections of wall or</i>
	Foundations will be repaired to be sound, reasonably level, and free from movement.	<i>Foundation replacements are beyond the scope of the program.</i>
	Spalling/Exposed Rebar	<i>Significant spalled areas affecting more than 10% of any foundation wall or any exposed reinforcing material--rebar or other</i>
Health and Safety	Electrical Hazards - Exposed Wires/Open Panels	<i>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</i>
	Electrical Hazards - Water Leaks on/near Electrical Equipment	<i>Any water leaking, puddling, or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution, or explosion</i>
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable	<i>The exit cannot be used, or exit is limited because a door or window is nailed shut, a lock is broken, panic hardware is chained, debris, storage, or other conditions block exit</i>
	Emergency Fire Exits - Missing Exit Signs	<i>Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign</i>
	Flammable/Combustible Materials - Improperly Stored	<i>Flammable materials are improperly stored, causing the potential risk of fire or explosion</i>
	Garbage and Debris - Outdoors	<i>Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Hazards - Other	<i>Any general defects or hazards that pose risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Any physical defect that could cause cutting or breaking of human skin or other bodily harm</i>
	Hazards - Tripping	<i>Any physical defect in walkways or other travelled area that poses a tripping risk</i>
	Infestation - Insects	<i>Evidence of infestation of insects-including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk</i>
	Infestation - Rats/Mice/Vermin	<i>Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk</i>
Lighting	Broken Fixtures/Bulbs	<i>10% or more of the lighting fixtures and bulbs surveyed are broken or missing</i>
Roofs	Damaged Soffits/Fascia	<i>Soffits or fascia that should be there are missing or so damaged that water penetration is visibly possible</i>

	Damaged Vents	<i>Vents are missing or so visibly damaged that further roof damage is possible</i>
	Damaged/Clogged Drains	<i>The drain is damaged or partially clogged with debris or the drain no longer functions</i>
	Damaged/Torn Membrane/Missing Ballast	<i>Ballast has shifted and no longer functions as it should or there is damage to the roof membrane that may result in water penetration</i>
	Missing/Damaged Components from Downspout/Gutter	<i>Drainage system components are missing or damaged causing visible damage to the roof, structure, exterior wall surface, or interior</i>
	Missing/Damaged Shingles	<i>Roofing shingles are missing or damaged enough to create a risk of water penetration</i>
	Ponding	<i>Evidence of standing water on roof, causing potential or visible damage to roof surface or underlying materials</i>
Walls	Cracks/Gaps	<i>Any large crack or gap that is more than 3/8 inches wide or deep and 6 inches long that presents a possible sign of serious structural problem or opportunity for water penetration</i>
	Damaged Chimneys	<i>Part or all of the chimney has visibly separated from the adjacent wall or there are cracked or missing pieces large enough to present a sign of chimney failure or there is a risk of falling pieces that could create</i>
	Missing/Damaged Caulking/Mortar	<i>Any exterior wall caulking or mortar deterioration that presents a risk of water penetration or risk of structural damage</i>
	Missing Pieces/Holes/Spalling	<i>Any exterior wall deterioration or holes of any size that present a risk of water penetration or risk of structural damage</i>
	Stained/Peeling/Needs Paint	<i>More than 20% of the exterior paint is peeling or paint is missing and siding surface is exposed thereby exposing siding to water penetration and deterioration</i>
Windows	Broken/Missing/Cracked Panes	<i>Any missing panes of glass or cracked panes of glass where the crack is either greater than 4" and/or substantial enough to impact the structural integrity of the windowpane</i>
	Damaged Sills/Frames/Lintels/Trim	<i>Sills, frames, lintels, or trim are missing or damaged, exposing the inside of the surrounding walls and compromising its weather tightness</i>
	Damaged/Missing Screens	<i>Missing screens or screens with holes greater than 1 inch by 1 inch or tears greater than 2 inches in length</i>
	Missing/Deteriorated Caulking/Seals/Glazing Compound	<i>There are missing or deteriorated caulk or seals--with evidence of leaks or damage to the window or surrounding structure</i>
	Peeling/Needs Paint	<i>More than 20% of the exterior window paint is peeling or paint is missing, and window frame surface is exposed thereby exposing window frame to water penetration and deterioration</i>
Porches	Deteriorated concrete porches will be repaired when possible. Unsafe wood porch components will be repaired with readily available materials to conform closely to historically accurate porches in the neighborhood. Porch repairs will be structurally sound, with smooth and even decking surfaces. Deteriorated wood structural components will be replaced with preservative-treated wood.	<i>Porches on buildings designated as historic will be rebuilt to conform closely to historically accurate porches in the neighborhood. Decks on non-historic porches will be replaced with 5/4" preservative-treated decking. Replaced railings will meet code. Replaced wood structural components will be preservative treated.</i>
Railings	Existing handrails will be structurally sound. Guard rails are required on any accessible area with a walking surface over 30" above the adjacent ground level. Sound railings may be repaired if it is possible to maintain the existing style. On historic structures railing repairs will be historically sensitive.	<i>Handrails will be present on one side of all interior and exterior steps or stairways with more than two risers and around porches or platforms over 30" above the adjacent ground level and will meet local codes. Handrails and guard rails will conform to the style of similar components in the neighborhood. On historic structures new railings will be historically sensitive.</i>
Steps & Decks	Steps, stairways, and porch decks will be structurally sound, reasonably level, with smooth and even surfaces. Repairs will match existing materials,	<i>In non-historic structures wood decking may be replaced with 5/4" X 6" preservative-treated material and new steps will be constructed from nominal 2" preservative-treated wood. On</i>

		<i>historic structures new wood decking will be ¾" clear T & G fir, primed on all 6 sides before installation.</i>
House Numbers & Mailboxes		<i>All houses will have 4" house numbers clearly displayed near the front door, and a standard size mailbox, preferably wall-hung at the entrance.</i>
Structural Walls	Structural framing and masonry will be free from visible deterioration, rot, or serious termite damage, and be adequately sized for current loads. Prior to rehab, all sagging floor joists or rafters will be visually inspected, and significant structural damage and its cause will be corrected.	<i>New structural walls will be a minimum of 2" x 4", 16" OC. All exterior walls that are part of the building envelope (the air barrier and thermal barrier separating the conditioned space from the non-conditioned space) will be insulated with a minimum R-13 insulation and sheathed to code.</i>
Additions	NA	<i>New additions are acceptable only when – for marketing and livability reasons – it is necessary to add additional bedroom space. Stamped plans must be submitted to the City Building Official for review and approval prior to bidding. All standards for Exterior Building Surfaces, Roofing, Windows and Doors, Insulation and Ventilation, Plumbing, Electrical, HVAC apply.</i>
Gutters & Downspouts	Gutters and downspouts must be in good repair, leak free and collect storm water from all lower roof edges. Concrete splash blocks will be installed to move water away from the foundation. The system must move all storm water away from the building and prevent water from entering the structure. In addition to positive drainage away from the building, outlets will be a minimum of 3 feet away from the foundation whenever there is a history of water problems.	<i>Gutters and downspouts will be installed and collect storm water from all lower roof edges. Concrete splash blocks will be installed to move water away from the foundation. The system must move all storm water away from the building and prevent water from entering the structure. In addition to positive drainage away from the building, outlets will be a minimum of 3 feet away from the foundation whenever there is a history of water problems.</i>
Infiltration	All homes or units will be tested with a Blower Door and any existing air sealing will be repaired to attain a maximum 0.35 Air Changes per Hour at 50 Pascal pressure (0.35 ACH50).	<i>All homes or units will be air sealed to meet the minimum Blower Door test requirements of 0.35 Air Changes per Hour at 50 Pascal pressure (0.35 ACH50). The envelopes of all homes or units will have a continuous air barrier and a continuous thermal barrier that is in contact with the air barrier. Attic insulation shall be a minimum of R38 with soffit baffles installed when there are soffit vents to maintain ventilation at the eaves. All exterior walls opened in the course of renovations shall be insulated with un-faced fiberglass batts or damp spray cellulose to R13 for 2x4 framing and R19 for 2x6 framing. Whenever financially feasible, 1-inch, foil-faced polyisocyanurate foam board will be added under new siding. Rim joists will be insulated to R19 with either foil-faced foam board or Class 1-rated spray foam. Crawl space walls shall be insulated with 1-inch, foil-faced polyisocyanurate foam board and a 6-mil plastic vapor barrier will be installed continuously over the ground to the sill plate with all seams sealed. The ENERGY STAR Thermal Bypass Inspection Checklist shall be completed for each home. http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/Thermal_Bypass_Inspection_Checklist.pdf</i>
Ventilation	All homes shall meet the most recent ASHRAE 62.2 standard by using one bathroom fan continuously operating at a verified CFM rate sufficient to meet the ASHRAE standard and creating < 0.3 Sones of fan noise. The fan will also have a > 80 CFM boost function switched one of three ways: by a switch at the entrance, with an adjustable time-delay function that runs the fan for an additional period after the switch is turned off; or a motion detector with an adjustable time-delay function that runs the fan for an additional period after the motion detector ceases to see motion; or by a humidistat. Any additional bathrooms must be mechanically vented to the > 80 CFM standard with the time-delay switching described above.	<i>One bathroom must have a bath fan that meets the Whole House Ventilation requirement and also have a > 80 CFM boost function switched one of three ways: by a switch at the entrance, with an adjustable time-delay function that runs the fan for an additional period after the switch is turned off; or a motion detector with an adjustable time-delay function that runs the fan for an additional period after the motion detector ceases to see motion; or by a humidistat. Any additional bathrooms must be mechanically vented to the > 80 CFM standard with the time-delay switching described above. All kitchens must have mechanical ventilation operating at a maximum of 20 Sones and producing a minimum of 150 CFM after accounting for ducting losses. All ductworks will be</i>

	<p>after the motion detector ceases to see motion; or by a humidistat.</p> <p>1 square foot of free venting must be supplied for every SF of area directly under the roof if there is no soffit venting. 1 square foot of free venting must be supplied for every 300 SF of area directly under the roof if 20% of the venting is soffit vent and if the living space ceiling directly below the roof has a rating of one perm or less. (1 perm is achievable with a coating of ICI Dulux Ultra Hide Vapor Barrier paint 1060-1200 per manufacturer's instructions)</p>	<p><i>heavy gauge galvanized metal, airtight with mastic-sealed seams (no duct tape). It is preferred that mechanical ventilation exits at side walls and not at the soffit to minimize the potential for ice damming.</i></p> <p><i>The venting requirement is the same as with the Repair Standard above with a strong preference for a combination of ridge vents, soffit vents and the one perm-rated ceiling required for the 1 to 300 ratio.</i></p>
Security Bars	Security Bars Prevent Egress	<i>The ability to exit through egress window is limited by security bars that do not function properly and, therefore, pose safety risks</i>
Requirements for Building Systems		
Domestic Water	Leaking Central Water Supply	<i>Leaking water from water supply line is observed</i>
	Missing Pressure Relief Valve	<i>There is no pressure relief valve or pressure relief valve does not drain down to the floor</i>
	Rust/Corrosion on Heater Chimney	<i>The water heater chimney shows evidence of flaking, discoloration, pitting, or crevices that may create holes that could allow toxic gases to leak from the chimney</i>
	Water Supply Inoperable	<i>There is no running water in any area of the building where there should be</i>
Electrical System	Blocked Access/Improper Storage	<i>One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency</i>
	Burnt Breakers	<i>Carbon residue, melted breakers or arcing scars are evident</i>
	Evidence of Leaks/Corrosion	<i>Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures, or any evidence of water leaks in the enclosure or hardware</i>
	Frayed Wiring	<i>Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire</i>
	Missing Breakers/Fuses	<i>Any open and/or exposed breaker port</i>
	Missing Outlet Covers	<i>A cover is missing, which results in exposed visible electrical connections</i>
Elevators	Not Operable	<i>The elevator does not function at all, or the elevator doors open when the cab is not there</i>
Emergency Power	Auxiliary Lighting Inoperable (if applicable)	<i>Auxiliary lighting does not function</i>
Fire Protection	Missing Sprinkler Head	<i>Any sprinkler head is missing, visibly disabled, painted over, blocked, or capped</i>
	Missing/Damaged/Expired Extinguishers	<i>There is missing, damaged or expired fire extinguisher and any area of the building where a fire extinguisher is required</i>
Health & Safety	Air Quality - Mold and/or Mildew Observed	<i>Evidence of mold or mildew is observed that is substantial enough to pose a health risk</i>
	Air Quality - Propane/Natural Gas/Methane Gas Detected	<i>Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled</i>
	Air Quality - Sewer Odor Detected	<i>Sewer odors that could pose a health risk if inhaled for prolonged periods</i>
	Electrical Hazards - Exposed Wires/Open Panels	<i>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</i>
	Electrical Hazards - Water Leaks on/near Electrical Equipment	<i>Any water leaking, puddling, or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution, or explosion</i>

	Elevator - Tripping	<i>An elevator is misaligned with the floor by more than 3/4 of an inch. The elevator does not level as it should, which causes a tripping hazard</i>
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable	<i>The exit cannot be used, or exit is limited because a door or window is nailed shut, a lock is broken, panic hardware is chained, debris, storage, or other conditions block exit</i>
	Emergency Fire Exits - Missing Exit Signs	<i>Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign</i>
	Flammable Materials - Improperly Stored	<i>Flammable materials are improperly stored, causing the potential risk of fire or explosion</i>
	Garbage and Debris - Indoors	<i>Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Hazards - Other	<i>Any general defects or hazards that pose risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Any physical defect that could cause cutting or breaking of human skin or other bodily harm</i>
	Hazards – Tripping Hazards	<i>Any physical defect in walkways or other travelled area that poses a tripping risk</i>
	Infestation - Insects	<i>Evidence of infestation of insects--including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk</i>
	Infestation - Rats/Mice/Vermin	<i>Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk</i>
HVAC	Boiler/Pump Leaks	<i>Evidence of water or steam leaking in piping or pump packing</i>
	Fuel Supply Leaks	<i>Evidence of any amount of fuel leaking from the supply tank or piping</i>
	General Rust/Corrosion	<i>Significant formations of metal oxides, significant flaking, discoloration, or the development of a noticeable pit or crevice</i>
	Misaligned Chimney/Ventilation System	<i>A misalignment of an exhaust system on a combustion fuel-fired unit (oil, natural gas, propane, wood pellets etc.) that causes improper or dangerous venting of gases</i>
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable	<i>The roof exhaust fan unit does not function</i>
Sanitary System	Broken/Leaking/Clogged Pipes or Drains	<i>Evidence of active leaks in or around the system components or evidence of standing water, puddles, or ponding--a sign of leaks or clogged drains</i>
	Missing Drain/Cleanout/Manhole Covers	<i>A protective cover is missing</i>
Requirements for Common Areas		
Basement/Garage/Carport	Baluster/Side Railings - Damaged	<i>Any damaged or missing balusters or side rails that limit the safe use of an area</i>
Closet/Utility/Mechanical	Cabinets - Missing/Damaged	<i>10% or more of cabinet, doors, or shelves are missing or the laminate is separating</i>
Community Room	Call for Aid - Inoperable	<i>The system does not function as it should</i>
Halls/Corridors/Stairs	Ceiling - Holes/Missing Tiles/Panels/Cracks	<i>Any holes in ceiling, missing tiles or large cracks wider than 1/4 of an inch and greater than 11 inches long</i>
Kitchen	Ceiling - Peeling/Needs Paint	<i>More than 10% of ceiling has peeling paint or is missing paint</i>
Laundry Room	Ceiling - Water Stains/Water Damage/Mold/Mildew	<i>Evidence of a leak, mold or mildew--such as a darkened area--over a ceiling area greater than 1 foot square</i>
Lobby	Countertops - Missing/Damaged	<i>10% or more of the countertop working surface is missing, deteriorated, or damaged below the laminate ---not a sanitary surface to prepare food</i>
Office	Dishwasher/Garbage Disposal - Inoperable	<i>The dishwasher or garbage disposal does not operate as it should</i>

Other Community Spaces	Doors - Damaged Frames/Threshold/Lintels/Trim	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
Patio/Porch/Balcony	Doors - Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
Restrooms	Doors - Damaged Surface (Holes/Paint/Rust/Glass)	Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass
Storage	Doors - Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Doors - Deteriorated/Missing Seals (Entry Only)	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Doors - Missing Door	Any door that is missing that is required for the functional use of the space
	Dryer Vent - Missing/Damaged/Inoperable	The dryer vent is missing, or it is not functioning because it is blocked. Dryer exhaust is not effectively vented to the outside
	Electrical - Blocked Access to Electrical Panel	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Electrical - Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Electrical - Evidence of Leaks/Corrosion	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware
	Electrical - Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	Electrical - Missing Breakers	Any open and/or exposed breaker port
	Electrical - Missing Covers	A cover is missing, which results in exposed visible electrical connections
	Floors - Bulging/Buckling	Any flooring that is bulging, buckling, or sagging or a problem with alignment between flooring types
	Floors - Floor Covering Damaged	More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas, or exposed seams.
	Floors - Missing Floor/Tiles	More than 5% of the flooring or tile flooring is missing
	Floors - Peeling/Needs Paint	Any painted flooring that has peeling or missing paint on more than 10% of the surface
	Floors - Rot/Deteriorated Subfloor	Any rotted or deteriorated subflooring greater than 6 inches by 6 inches
	Floors - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold, or mildew--such as a darkened area--covering a flooring area greater than 1 foot square
	GFI - Inoperable	The GFI does not function
	Graffiti	Any graffiti on any exposed surface greater than 6 inches by 6 inches
	HVAC - Convection/Radiant Heat System Covers Missing/Damaged	Cover is missing or substantially damaged, allowing contact with heating/surface elements or associated fans
	HVAC - General Rust/Corrosion	Significant formations of metal oxides, flaking, or discoloration--or a pit or crevice
	HVAC - Inoperable	HVAC does not function. It does not provide the heating and cooling it should. The system does not respond when the controls are engaged
	HVAC - Misaligned Chimney/Ventilation System	Any misalignment that may cause improper or dangerous venting of gases
	HVAC - Noisy/Vibrating/Leaking	HVAC system shows signs of abnormal vibrations, other noise, or leaks when engaged
	Lavatory Sink - Damaged/Missing	Sink has extensive discoloration or cracks in over 50% of the basin or the sink or associated hardware have failed or are missing, and the sink can't be used

	Lighting - Missing/Damaged/Inoperable Fixture	<i>More than 10% of the permanent lighting fixtures are missing or damaged so they do not function</i>
	Mailbox - Missing/Damaged	<i>The U.S Postal Service mailbox cannot be locked or is missing</i>
	Outlets/Switches/Cover Plates - Missing/Broken	<i>Outlet or switch is missing, or a cover plate is missing or broken, resulting in exposed wiring</i>
	Pedestrian/Wheelchair Ramp	<i>A walkway or ramp is damaged and cannot be used by people on foot, in wheelchair, or using walkers</i>
	Plumbing - Clogged Drains	<i>Drain is substantially or completely clogged or has suffered extensive deterioration</i>
	Plumbing - Leaking Faucet/Pipes	<i>A steady leak that is adversely affecting the surrounding area</i>
	Range Hood /Exhaust Fans - Excessive Grease/Inoperable	<i>A substantial accumulation of dirt or grease that threatens the free passage of air</i>
	Range/Stove - Missing/Damaged/Inoperable	<i>One or more burners are not functioning, or doors or drawers are impeded or on gas ranges pilot is out and/or flames are not distributed equally or oven not functioning</i>
	Refrigerator - Damaged/Inoperable	<i>The refrigerator has an extensive accumulation of ice or the seals around the doors are deteriorated or is damaged in any way which substantially impacts its performance</i>
	Restroom Cabinet - Damaged/Missing	<i>Damaged or missing shelves, vanity top, drawers, or doors that are not functioning as they should for storage or their intended purpose</i>
	Shower/Tub - Damaged/Missing	<i>Any cracks in tub or shower through which water can pass or extensive discoloration over more than 20% of tub or shower surface or tub or shower is missing</i>
	Sink - Missing/Damaged	<i>Any cracks in sink through which water can pass or extensive discoloration over more than 10% of the sink surface or sink is missing</i>
	Smoke Detector - Missing/Inoperable	<i>Smoke detector is missing or does not function as it should</i>
	Stairs - Broken/Damaged/Missing Steps	<i>A step is missing or broken</i>
	Stairs - Broken/Missing Hand Railing	<i>The handrail is missing, damaged, loose or otherwise unusable</i>
	Ventilation/Exhaust System - Inoperable	<i>exhaust fan is not functioning, or window designed for ventilation does not open</i>
	Walls - Bulging/Buckling	<i>Bulging, buckling or sagging walls or a lack of horizontal alignment</i>
	Walls - Damaged	<i>Any hole in wall greater than 2 inches by 2 inches</i>
	Walls - Damaged/Deteriorated Trim	<i>10% or more of the wall trim is damaged</i>
	Walls - Peeling/Needs Paint	<i>10% or more of interior wall paint is peeling or missing</i>
	Walls - Water Stains/Water Damage/Mold/Mildew	<i>Evidence of a leak, mold or mildew--such as a common area--covering a wall area greater than 1 foot square</i>
	Water Closet/Toilet - Damaged/Clogged/Missing	<i>Fixture elements--seat, flush handle, cover etc.--are missing or damaged or the toilet seat is cracked or has a broken hinge or toilet cannot be flushed</i>
	Windows - Cracked/Broken/Missing Panes	<i>Any missing panes of glass or cracked panes of glass where the crack is either greater than 4" and/or substantial enough to impact the structural integrity of the windowpane</i>
	Windows - Damaged Windowsill	<i>The sill is damaged enough to expose the inside of the surrounding walls and compromise its weather tightness</i>
	Windows - Inoperable/Not Lockable	<i>Any window that is not functioning or cannot be secured because lock is broken</i>
	Windows - Missing/Deteriorated Caulking/Seals/Glazing Compound	<i>There are missing or deteriorated caulk or seals--with evidence of leaks or damage to the window or surrounding structure</i>
	Windows - Peeling/Needs Paint	<i>More than 10% of interior window paint is peeling or missing</i>
	Windows - Security Bars Prevent Egress	<i>The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks</i>

Health & Safety	Air Quality - Mold and/or Mildew Observed	<i>Evidence of mold or mildew is observed that is substantial enough to pose a health risk</i>
	Air Quality - Propane/Natural Gas/Methane Gas Detected	<i>Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled</i>
	Air Quality - Sewer Odor Detected	<i>Sewer odors that could pose a health risk if inhaled for prolonged periods</i>
	Electrical Hazards - Exposed Wires/Open Panels	<i>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</i>
	Electrical Hazards - Water Leaks on/near Electrical Equipment	<i>Any water leaking, puddling, or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</i>
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable	<i>The exit cannot be used, or exit is limited because a door or window is nailed shut, a lock is broken, panic hardware is chained, debris, storage, or other conditions block exit</i>
	Emergency Fire Exits - Missing Exit Signs	<i>Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign</i>
	Flammable/Combustible Materials - Improperly Stored	<i>Flammable or combustible materials are improperly stored, causing the potential risk of fire or explosion</i>
	Garbage and Debris - Indoors	<i>Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Garbage and Debris - Outdoors	<i>Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Hazards - Other	<i>Any general defects or hazards that pose risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Any physical defect that could cause cutting or breaking of human skin or other bodily harm</i>
	Hazards - Tripping	<i>Any physical defect in walkways or other travelled area that poses a tripping risk</i>
	Infestation - Insects	<i>Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk</i>
	Infestation - Rats/Mice/Vermin	<i>Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk</i>
Pools and Related Structures	Fencing - Damaged/Not Intact	<i>Any damage that could compromise the integrity of the fence</i>
Trash Collection Areas	Chutes - Damaged/Missing Components	<i>Garbage has backed up into chutes, because the collection structure is missing or broken or compactors or components--chute, chute door, and other components--have failed</i>
Requirements for Unit		
Bathroom	Bathroom Cabinets - Damaged/Missing	<i>Damaged or missing shelves, vanity tops, drawers, or doors that are not functioning as they should for storage or their intended purpose</i>
	Lavatory Sink - Damaged/Missing	<i>Any cracks in sink through which water can pass or extensive discoloration over more than 10% of the sink surface or sink is missing</i>
	Plumbing - Clogged Drains, Faucets	<i>Drain or faucet is substantially or completely clogged or has suffered extensive deterioration</i>
	Plumbing - Leaking Faucet/Pipes	<i>A steady leak that is adversely affecting the surrounding area</i>
	Shower/Tub - Damaged/Missing	<i>Any cracks in tub or shower through which water can pass or extensive discoloration over more than 20% of tub or shower surface or tub or shower is missing</i>
	Ventilation/Exhaust System – Absent/Inoperable	<i>exhaust fan is not functioning, or window designed for ventilation does not open</i>
	Water Closet/Toilet - Damaged/Clogged/Missing	<i>Fixture elements--seat, flush handle, cover etc.--are missing or damaged or the toilet seat is cracked or has a broken hinge or toilet cannot be flushed</i>

Call-for-Aid	Inoperable	<i>The system does not function as it should</i>
Ceiling	Bulging/Buckling/Leaking	<i>Bulging, buckling or sagging ceiling or problem with alignment</i>
	Holes/Missing Tiles/Panels/Cracks	<i>Any holes in ceiling, missing tiles, or large cracks wider than 1/4 of an inch and greater than 6 inches long</i>
	Peeling/Needs Paint	<i>More than 10% of ceiling has peeling paint or is missing paint</i>
	Water Stains/Water Damage/Mold/Mildew	<i>Evidence of a leak, mold or mildew--such as a darkened area--over a ceiling area greater than 1 foot square</i>
Doors	Damaged Frames/Threshold/Lintels/Trim	<i>Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel, or trim</i>
	Damaged Hardware/Locks	<i>Any door that does not function as it should or cannot be locked because of damage to the door's hardware</i>
	Damaged/Missing Screen/Storm/Security Door	<i>Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing</i>
	Damaged Surface - Holes/Paint/Rusting/Glass/Rotting	<i>Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass</i>
	Deteriorated/Missing Seals (Entry Only)	<i>The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should</i>
	Missing Door	<i>Any door that is required for security (entry) or privacy (Bathroom) that is missing or any other unit door that is missing and is required for proper unit functionality</i>
Electrical System	Blocked Access to Electrical Panel	<i>One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency</i>
	Burnt Breakers - Distribution panels will have a main disconnect, at least 10 circuit-breaker-protected circuits, a 100-amp minimum capacity and be adequate to safely supply existing and proposed devices. If a working central air conditioning system is present, the minimum service will be 150 amp.	<i>Carbon residue, melted breakers or arcing scars are evident</i>
	Evidence of Leaks/Corrosion	<i>Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware</i>
	Frayed Wiring Exposed knob and tube will be replaced. Every room will have a minimum of two duplex receptacles, placed on separate walls and one light fixture or receptacle switched at each room entrance. Where the source wiring circuit is accessible (e.g. first floor above basements, in gutted rooms, etc.), receptacles will be grounded. All switches, receptacle, and junction boxes will have appropriate cover plates. Wiring will be free from hazard, and all circuits will be properly protected at the panel. Floor receptacles will be removed, and a metal cover plate installed. Exposed conduit is allowed. Bedrooms receptacles will be protected by an Arc Fault breaker. There must be one electrical receptacle on the service panel. Basements will have a minimum of 3 keyless bare bulb fixtures switched at the top of the stairs.	<i>Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire</i>
	GFI - Inoperable	<i>The GFI does not function</i>

	Missing Breakers/Fuses	<i>Any open and/or exposed breaker port</i>
	Missing Covers	<i>A cover is missing, which results in exposed visible electrical connections</i>
Floors	Bathroom, kitchen, and other water-susceptible floor areas will be covered with water-resistant flooring that is free from tears or tripping hazards. The damaged wood floor will be repaired. When existing deteriorated carpet is installed over hardwood floors, the hardwood will be refinished whenever possible. Basement floors will be continuous concrete at least 1" thick.	<i>Baths will receive resilient sheet goods over plywood underlayment, and kitchens will receive resilient sheet goods or tile over plywood underlayment. Whenever possible, rooms other than kitchens and baths with existing wood flooring will be maintained as wood floors and refinished when appropriate. Rooms other than kitchens or baths without usable wood floors may be finished with carpet and associated products that are Carpet and Rug Institute's Green Label certified. New basement slabs will be at least 3" thick and have a 6-mil vapor barrier.</i>
	Bulging/Buckling	<i>Any flooring that is bulging, buckling, or sagging or a problem with alignment between flooring types</i>
	Floor Covering Damage	<i>More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas, or exposed seams.</i>
	Missing Flooring Tiles	<i>Any flooring or tile flooring that is missing</i>
	Peeling/Needs Paint	<i>Any painted flooring that has peeling or missing paint on more than 10% of the surface</i>
	Rot/Deteriorated Subfloor	<i>Any rotted or deteriorated subflooring greater than 6 inches by 6 inches</i>
	Water Stains/Water Damage/Mold/Mildew	<i>Evidence of a leak, mold or mildew--such as a darkened area--covering a flooring area greater than 1 foot square</i>
Health & Safety	Air Quality - Mold and/or Mildew Observed	<i>Evidence of mold or mildew is observed that is substantial enough to pose a health risk</i>
	Air Quality - Sewer Odor Detected	<i>Sewer odors that could pose a health risk if inhaled for prolonged periods</i>
	Air Quality - Propane/Natural Gas/Methane Gas Detected	<i>Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled</i>
	Electrical Hazards - Exposed Wires/Open Panels	<i>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</i>
	Electrical Hazards - Water Leaks on/near Electrical Equipment	<i>Any water leaking, puddling, or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</i>
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable	<i>The exit cannot be used, or exit is limited because a door or window is nailed shut, a lock is broken, panic hardware is chained, debris, storage, or other conditions block exit</i>
	Emergency Fire Exits - Missing Exit Signs	<i>Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign</i>
	Flammable Materials - Improperly Stored	<i>Flammable materials are improperly stored, causing the potential risk of fire or explosion</i>
	Garbage and Debris - Indoors	<i>Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Garbage and Debris - Outdoors	<i>Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris</i>
	Hazards - Other	<i>Any general defects or hazards that pose risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Any physical defect that could cause cutting or breaking of human skin or other bodily harm</i>
	Hazards - Tripping	<i>Any physical defect in walkways or other travelled area that poses a tripping risk</i>
	Infestation - Insects	<i>Evidence of infestation of insects-including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk</i>
	Infestation - Rats/Mice/Vermin	<i>Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk</i>

Hot Water Heater	Misaligned Chimney/Ventilation System	<i>Any misalignment that may cause improper or dangerous venting of gases</i>
	Inoperable Unit/Components - Each housing unit will have a working water heater less than 3 years old with a minimum capacity of 40 gallons if it is gas-fired. Gas water heaters more than 3 years old may be repaired if it is clear that a repair will make it operable. All electric water heaters will be replaced with a gas-fired model.	<i>Hot water from hot water taps is no warmer than room temperature indicating hot water heater is not functioning properly. All units will have a minimum 40-gallon, gas-fired water heater with a 10-year warranty installed to the mechanical code. High efficiency power-vented or sealed combustion tankless models are required.</i>
Water Supply	Minimum 10 yrs. The main shut off valve must be operable and completely stop the flow of water to the house. All fixtures must be leak-free and deliver sufficient cold water and, where applicable, hot water.	<i>The main shut off valve must be operable and completely stop the flow of water to the house and should be replaced if it does not. Lead and galvanized pipe that is part of the water service or the distribution system will be replaced with copper. All fixtures will have brass shut off valves. One freeze-protected exterior hose bib is required.</i>
	Leaking Valves/Tanks/Pipes	<i>There is evidence of active water leaks from hot water heater or related components</i>
	Pressure Relief Valve Missing	<i>There is no pressure relief valve or pressure relief valve does not drain down to the floor</i>
	Rust/Corrosion	<i>Significant formations of metal oxides, flaking, or discoloration--or a pit or crevice</i>
HVAC System	Convection/Radiant Heat System Covers Missing/Damaged. Non-functioning, non-repairable air conditioners will be removed and drained of all CFCs. Existing central air conditioning will be inspected, serviced, and refurbished to operate safely.	<i>The cover is missing or substantially damaged, allowing contact with heating/surface elements or associated fans. New HVAC systems will have a rough-in installed for air conditioning (> 13 SEER) Minimum 20 yr. life</i>
	Inoperable	<i>HVAC does not function. It does not provide the heating and cooling it should. The system does not respond when the controls are engaged</i>
	Duct work and radiator piping will be well supported, insulated in unconditioned space and adequate to maintain 68°F measured 36" off the floor when the outside temperature is the average yearly minimum, in all habitable and essential rooms. All duct work will be insulated to R-7, sealed at all seams with mastic (not tape) and pressure tested to eliminate leakage.	<i>All duct work will be insulated to R-7, sealed at all seams with mastic (not tape), pressure tested to eliminate leakage and run in concealed space.</i>
	Misaligned Chimney/Ventilation System	<i>Any misalignment that may cause improper or dangerous venting of gases</i>
	Noisy/Vibrating/Leaking	<i>The HVAC system shows signs of abnormal vibrations, other noise, or leaks when engaged</i>
	Rust/Corrosion	<i>Deterioration from rust or corrosion on the HVAC system in the dwelling unit</i>
Heating	Workable existing heating systems will be inspected and serviced to operate in a safe manner. Regardless of condition, resistance electric heating systems will be removed and replaced with systems as described below, unless the home has either a very low heating load to super-insulation, solar gain, or a mild climate.	<i>Minimum 15 yrs. Gas-fired heating plants will be rated at > 92% AFUE or better. Oil-fired furnaces will be rated at > 83% AFUE or better. Oil-fired boilers will be rated at > 85% AFUE or better. Heat pumps will be rated at > 15 SEER. Setback thermostats are required. When electric resistance heating systems are replaced, soffits for ductwork and/or new distribution pipes for hot water heating systems will be provided. Up to 4 lineal feet of resistance electric heating strips per 1000 square feet of floor area may be retained or installed in areas that are not cost effective to heat via ductwork or hot water distribution systems.</i>
Chimney	Unused chimneys will be removed to below the roof line wherever roofing is replaced. Unsound chimneys will be repaired or removed. When chimneys must be used for combustion ventilation, they will be relined.	<i>The creation of new flues is not recommended in this program. The use of high efficiency closed combustion appliances is recommended to avoid the need for new flues. Replacement furnace flues, when required, will be metal double- or triple-walled as recommended by the furnace manufacturer.</i>
Kitchen	Cabinets - Missing/Damaged	<i>10% or more of cabinet, doors, or shelves are missing or the laminate is separating</i>

	Countertops - Missing/Damaged Kitchens will have a minimum of 10 feet of countertop with base and wall cabinets (or dishwasher) to match. Existing cabinets with hardwood doors and face frames may be repaired if in good condition. All cabinets will be sound and cleanable.	<i>10% or more of the countertop working surface is missing, deteriorated, or damaged below the laminate -- not a sanitary surface to prepare food. New kitchen cabinets will meet the ANSI A208.1 and A208.2 standard for formaldehyde content of particleboard and MDF or have exposed edges of particleboard and MDF sealed to prevent the out-gassing of formaldehyde. Cabinets will have hardwood doors and face frames. There will be a minimum of 10 lineal feet of post-formed countertop with corresponding base cabinets and wall cabinets, and a dishwasher. Corners in countertop designs are permitted if factory assembled. A drawer base (12" or 15") will be included in the new cabinetry. A plastic laminate panel to match the countertop will be installed as a base cabinet to wall cabinet backsplash behind the range and extending 6 inches past the range on both sides, or if the range is in a corner along the side wall and trimmed with chrome metal edging.</i>
	Dishwasher/Garbage Disposal - Inoperable	<i>The dishwasher or garbage disposal does not operate as it should</i>
	Plumbing - Clogged Drains	<i>Drain is substantially or completely clogged or has suffered extensive deterioration</i>
	Plumbing - Leaking Faucet/Pipes	<i>A steady leak that is adversely affecting the surrounding area</i>
	Range Hood/Exhaust Fans - Excessive Grease/Inoperable	<i>A substantial accumulation of dirt or grease that threatens the free passage of air</i>
	Range/Stove - Missing/Damaged/Inoperable	<i>One or more burners are not functioning, or doors or drawers are impeded or on gas ranges pilot is out and/or flames are not distributed equally or oven not functioning</i>
	Refrigerator- Missing/Damaged/Inoperable	<i>The refrigerator has an extensive accumulation of ice or the seals around the doors are deteriorated or is damaged in any way which substantially impacts its performance</i>
	Sink - Damaged/Missing	<i>Any cracks in sink through which water can pass or extensive discoloration over more than 10% of the sink surface or sink is missing</i>
Laundry Area (Room)	Dryer Vent - Missing/Damaged/Inoperable	<i>The dryer vent is missing, or it is not functioning because it is blocked. Dryer exhaust is not effectively vented to the outside</i>
Lighting	Missing/Inoperable Fixture	<i>A permanent light fixture is missing or not functioning, and no other switched light source is functioning in the room</i>
Outlets/Switches	Missing	<i>An outlet or switch is missing</i>
	Missing/Broken Cover Plates	<i>An outlet or switch has a broken cover plate over a junction box, or the cover plate is missing</i>
Patio/Porch/Balcony	Baluster/Side Railings Damaged	<i>Any damaged or missing balusters or side rails that limit the safe use of an area</i>
Smoke Detector	Missing/Inoperable	<i>Smoke detector is missing or does not function as it should</i>
Stairs	Broken/Damaged/Missing Steps	<i>A step is missing or broken</i>
	Broken/Missing Hand Railing	<i>The handrail is missing, damaged, loose or otherwise unusable</i>
Walls	Bulging/Buckling	<i>Bulging, buckling or sagging walls or a lack of horizontal alignment</i>
	Damaged	<i>Any hole in wall greater than 2 inches by 2 inches</i>
	Damaged/Deteriorated Trim	<i>10% or more of the wall trim is damaged</i>
	Peeling/Needs Paint	<i>10% or more of interior wall paint is peeling or missing</i>
	Water Stains/Water Damage/Mold/Mildew	<i>Evidence of a leak, mold or mildew covering a wall area greater than 1 foot square</i>
Windows	Cracked/Broken/Missing Panes	<i>Any missing panes of glass or cracked panes of glass where the crack is either greater than 4" and/or substantial enough to impact the structural integrity of the windowpane</i>
	Damaged Windowsill	<i>The sill is damaged enough to expose the inside of the surrounding walls and compromise its weather tightness</i>
	Missing/Deteriorated Caulking/Seals/Glazing Compound	<i>There are missing or deteriorated caulk or seals--with evidence of leaks or damage to the window or surrounding structure</i>

	Inoperable/Not Lockable	<i>Any window that is not functioning or cannot be secured because lock is broken</i>
	Peeling/Needs Paint	<i>More than 10% of interior window paint is peeling or missing</i>
	Security Bars Prevent Egress	<i>The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks</i>
CONTAMINANT (Green Standard)	Repair Standard (Min Life 15 yrs.)	Replacement Standard
Contaminants		<i>All materials installed will meet the following standards to minimize the presence of Volatile Organic Compounds (VOC) and Formaldehyde: •All paints and primers must meet the most recent Green Seal G-11 Environmental Standard. Http://www.greenseal.org/certification/standards/paints_and_coatings.pdf •Adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. http://www.aqmd.gov/rules/reg/reg11/r1168.pdf •All caulks and sealants, including floor finishes, must comply with regulation 8, rule 51 of the Bay Area Air Quality Management District. •All particleboard components will meet ANSI A208.1 for formaldehyde emission limits, or all exposed particleboard edges will be sealed with a low-VOC sealant or have a factory-applied, low-VOC sealant prior to installation. All MDF edges will meet ANSI A208.2 for formaldehyde emission limits, or all exposed MDF edges will be sealed with a low-VOC sealant or have a factory-applied, low-VOC sealant prior to installation.</i>
Lead-based paint (LBP)	For all houses constructed prior to 1978 - four (4) floors, two (2) window sills and two (2) window troughs (all randomly selected) plus a blank sample must be submitted to an EPA-accredited lead analytical laboratory and the dust samples must pass a dust wipe test for lead content as per the protocol in the HUD Guidelines. Lead-safe work practices must be followed, and only certified abatement contractors used to perform the work. See: http://www.hud.gov/offices/lead/lbp/hudguidelines/	<i>When stabilization of surfaces containing LBP is impractical, the most affordable solution for abatement of the component will be chosen. Walls containing LBP may be covered with drywall or gutted and replaced with drywall. Trim and other wood or metal components containing LBP may be removed and replaced with similar materials. Lead-safe work practices must be followed, and only certified abatement contractors used to perform the work.</i>
Asbestos	Non-friable intact Asbestos materials that are not creating a hazard such as cementitious exterior wall shingles may be left intact and painted if appropriate. Asbestos-resilient floor tiles may be labeled as such and covered with underlayment and new resilient flooring.	<i>Friable asbestos components such as boiler or pipe insulation, badly deteriorated cementitious shingles or deteriorated flooring will be removed and, if necessary, replaced with non-hazardous materials.</i>
Radon	All housing in this program will be subject to a "Short Term" Radon Test, and if the result is a reading of 4 pCi/L or higher, a follow-up "Short Term" test will be performed. When a second test is required, average the results. If the average is above 4 pCi/L, remediation will be required.	<i>If, as a result of the testing above, there is a presence of Radon at or above the 4 pCi/L level, remediation will be undertaken per the EPA guidance in their Consumer's Guide to Radon Reduction. Http://www.epa.gov/radon/pubs/consguid.html</i>
Mold	Any presence of mold is unacceptable and must be addressed per the National Center for Healthy Housing protocol "Creating a Healthy Home." http://www.nchh.org/Portals/0/Contents/FloodCleanupGuide_screen_.pdf	<i>All carpeting, drywall or other gypsum-based wall coverings or any other non-structural components with mold present will be removed and replaced. The National Center for Healthy Housing protocol "Creating a Healthy Home" will be followed for remediation of structural components.</i>

Fire safety		<p><i>Egress windows are required in all new sleeping and living areas unless other secondary means of escape requirements are met. The minimum dimensions for egress window clear openings are 20" wide by 24" tall, with a clear opening of 5.7 square feet. No bedrooms should be created in attics or basements unless Life Safety Code egress requirements are met.</i></p>
Fire and co2 alarms	<p>Existing fire and smoke, carbon monoxide and security systems that meet code will be repaired to operating condition.</p>	<p><i>Directly wired smoke detectors are required on each dwelling floor and in all bedrooms. CO detectors are required with all fuel-burning furnaces and water heaters in sleep areas and on each floor level.</i></p>