

**New Jersey National Housing Trust Fund
Program**

**MINIMUM HOUSING REHABILITATION
STANDARDS**

October 1, 2016

New Jersey National Housing Trust Fund Program

I. PURPOSE OF STANDARDS

1. The National Housing Trust Fund Rehabilitation Standards (known herein as the “HTF Standards”) are designed to outline the requirements for building rehabilitation for all New Jersey National Housing Trust Fund (NJHTF) funded housing projects. The HTF Standards are applicable to all NJHTF-funded rehabilitation projects. The HTF Standards, though a requirement specifically to the development entity in direct receipt of NJHTF funding, are written to provide guidance to all relevant members of a project development team.
2. The goal of the NJHTF 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 HTF Standards 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.
3. If a project is out of compliance with the HTF Standards, the grantee shall bring to the attention of NJHTF staff the specific portion of the project which does not comply, stating the reasons for non-compliance. NJHTF staff will make a determination as to whether an exception to the HTF Standards shall be granted.
4. Note: At the time of publication and adoption of the HTF Standards, the adopted codes referenced are believed to be those in force. As standards and codes change and are put into effect by the governing authorities having jurisdiction, the new standards and codes will apply in lieu of those referenced.

II. QUALITY OF WORK

1. Quality of Work: Grantees 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. Grantees and developers will employ best practice industry standards relating to quality assurance to verify all work completed.
2. Project Design Professionals
 - a. Projects will be designed by licensed professionals.
 - b. The project developer will formally contract with licensed architectural and engineering design professionals to provide appropriate professional services for each project. It is the responsibility of each licensed professional to assure that the scope

of work is done in accordance with the generally accepted practices in the their discipline, as well as designing the project to be in full conformance with all the applicable Federal, State and local codes.

- c. In addition, the architect or engineer will provide contract specifications which stipulate quality standards, materials choices and installation methods and standards. Such specifications may reference other appropriate standards set by different trades associations and testing agencies such as ASTM, Underwriters Laboratory (U/L), Tile Council of America, Gypsum National Roofing Contractors Association (NRCA) Architectural Woodwork Institute, SMACNA, ASTM, AFME, etc.
3. By meeting the various code requirements as a minimum standard, together with the other standards herein or in attendant, each building rehabilitation project is assured to be brought up to an acceptable level of rehabilitation.
4. Warranties shall be required per the standard construction contracts on all materials, equipment and workmanship.

III. HEALTH AND SAFETY

1. If the housing is occupied at the time of rehabilitation, any life-threatening deficiencies must be identified and addressed immediately. See Appendix A for a list of inspectable items and observable deficiencies, including the identification of life-threatening deficiencies (highlighted in red) for the property site, building exterior, building systems, common areas, and units.

IV. SCOPE OF WORK DETERMINATION

1. In developing scopes of work, grantees and developers will work with NJHTF staff to ensure that all requirements under the HTF Standards are satisfied and that the proposed scope of work meets the goals of Part I above.

V. EXPECTED USEFUL LIFE / REHABILITATION SCOPE & CAPITAL PLANNING

1. In developing scopes of work on housing rehabilitation projects NJHTF grantees and developers will consider the remaining expected useful life of major systems – including structural support, roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning with regard to building long-term sustainability and performance. Specifically, each

building component with a remaining expected useful life of less than the applicable HTF period of affordability (30 years) shall be considered for replacement, repair or otherwise updated. Additionally, new building components with an expected useful life of less than 30 years shall be considered for future replacement.

2. NJHTF Program requires a Capital Needs Assessment (CNA) if a project is 26 units or more. CNAs are required pursuant to the NJHMFA Capital Needs (CNA) Guidance.

http://www.nj.gov/dca/hmfa/media/download/tax/y15/tc_y15_capital_needs_assessment_guidelines.pdf

The industry standard period for CNAs is 20 years; however, project CNAs must be updated every five years during the life of the project to ensure projected capital needs through the 30-year HTF affordability period are anticipated and planned for. The initial CNA will cover years 1-20. The first 5-year update will be done in year 5 and cover years 6-25. The second 5-year update will be done in year 10 and will cover years 11-30.

3. Once a scope of work has been developed by the grantee and their development team, the grantee must also develop a Capital Plan. 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 for at least 20 years, the length of the capital plan, with subsequent updates every five years during the 30-year affordability period. However, since NJHTF requires updates of the capital plan to be performed every 5 years, replacement during that 20-year period will show up on the next 20-year capital plan which will be performed in year 5 of the project and cover years 6-25. During these 5-year capital plan updates, the project reserve contributions will be reviewed to ensure all future capital expenditures articulated in the capital plan are adequately funded through the 30-year affordability period.
4. Monthly replacement reserves contributions of at least \$50 per unit per month are required through the 30-year affordability period. If the initial 20-year capital plan (and/or any subsequent 5-year updates) indicate that replacement costs for the period exceed the amount generated by a \$50 per unit contribution, a higher per unit contribution will be required.
5. Grantees and their development teams should ensure that all building components are analyzed as part of a comprehensive effort to balance rehabilitation scope and capital planning in a way which maximizes long-term building performance as much as possible within the parameters of both development and projected operational funding available.

VI. ENERGY EFFICIENCY

1. All NJHTF-funded projects shall be subject to the HUD CPD Green Building Retrofit Checklist included as Appendix B. As outlined in those standards, all projects will either achieve the target energy efficiency objectives of the standard or present an operational case for project sustainability pursuant to the financial structure of the project.
2. In both the design and implementation of project rehabilitation scopes of work, particular emphasis should be made to maximize the effectiveness of the energy efficiency related work scopes.
3. Work performed that is considered Reconstruction is required to comply with EPA ENERGY STAR Version 3.0 standards. Reconstruction is defined as a project that where the extent and nature of the work is such that the work area cannot be occupied while the work is in progress and where a new certificate of occupancy is required before the work area can be reoccupied. Reconstruction may include repair, renovation, alteration or any combination thereof.

Reconstruction shall not include projects comprised only of floor finish replacement, painting or wallpapering, or the replacement of equipment or furnishings. Asbestos hazard abatement and lead hazard abatement projects shall not be classified as reconstruction solely because occupancy of the work area is not permitted. Reconstruction includes the replacement and / or improvement of all the major systems of the building, including its envelope. The building envelope is defined as the air barrier and thermal barrier separating exterior from interior space. For reconstruction projects, this could include either removing materials down to the studs or structural masonry on one side of the exterior walls and subsequently improving the building envelope to meet the whole-building energy performance levels for the project type, or creating a new thermal and air barrier around the building that allows the project to achieve building energy performance levels for the project type.

Renovation, defined as a project that does not include major systems or building envelope work or the removal and replacement or covering of existing interior or exterior finish, trim, doors, windows, or other materials with new materials that serve the same purpose and does not change the configuration of space. Renovation shall include the replacement of equipment or fixtures. Renovation will comply with the Green Building Retrofit Checklist as applicable.

Any reference in this document related to repair/replacement of items mentioned in the Green Building Retrofit Checklist shall be treated as a requirement

VII. DISASTER MITIGATION

1. To the extent applicable/relevant, the housing must be improved to mitigate the potential impact of potential disasters (e.g. earthquakes, hurricanes, floods, wildfires) in accordance with state or local codes, ordinances, and requirements, or such other requirements that HUD may establish.
2. Specifically regarding flood hazards:
 - a. Projects shall meet FEMA federal regulation, and HUDs' floodplain management requirements at 24 CFR 55, including the 8-Step Floodplain Management Process (when applicable) at 24 CFR 55.20.
 - b. Projects shall meet erosion prevention requirements per local municipality regulations.

VIII. CODE COMPLIANCE AND APPLICABLE GOVERNMENT STANDARDS - Uniform Building Rehab Code – (NJURC)

1. All work shall comply with all applicable New Jersey State and local codes, ordinances, and zoning requirements. Key currently updated New Jersey State Uniform Construction Code (NJUCC) is located at <http://www.nj.gov/dca/divisions/codes/codreg/ucc.html>
2. The State of New Jersey maintains rehabilitation codes found in Title 5. Community Affairs Chapter 23. Uniform Construction Code Subchapter 6. Rehabilitation Subcode N.J.A.C 5:23-6 (NJURC) located at http://www.state.nj.us/dca/divisions/codes/codreg/pdf_regs/njac_5_23_6.pdf
3. The NJHTF grantee must demonstrate compliance with all state and local codes through project affiliation with professional design team drawing certification and/or other approved methods such as state inspector certification.
4. A code review analysis will be produced by the project's design professionals itemizing the applicable codes for each area of discipline.
5. The HTF Standards are designed to exceed the Uniform Physical Condition Standards (UPCS) and New Jersey State Uniform Construction Code (NJUCC) to ensure that upon completion, the HTF-assisted project and units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703 and each project is in the best possible condition to meet this goal over its period of affordability (30 years)

- Example #1: Furnace or boiler that is more than 10 years old or not high efficiency Energy Star type will be replaced
 - Example #2: Roofing will be replaced if older than 10 years.
6. New Jersey Uniform Construction Code – N.J.A.C. 5:23-6, (NJUCC) and The State of New Jersey Rehabilitation Code (NJURC)
 7. The NJURC is the governing code by which the property repairs shall be judged.
 8. Uniform Physical Condition Standards (UPCS)

NEW WORK

New addition to existing building, replacement equipment and appliances shall be in compliance with:

1. Uniform Building Rehab Code – New Jersey (NJURC).
2. HUD CPD Green Building Retrofit Checklist for all appropriate items to the extent feasible. Energy Star Qualified Homes, Version 3 National Program, if applicable.

REPAIR WORK

Repairs are defined as the restoration to good, sound condition of materials, systems and / or components that are worn, deteriorated or broken using materials or components that are identical or closely similar to existing materials. There is no limit to the amount of repair work that can be undertaken.

The following products and practices shall be required.

1. All toilets shall be replaced with water saving at a maximum of 1.28 gallons per flush per Green Building Retrofit Checklist.
2. Approved ADA grab-bars shall be installed in all bathrooms
3. All windows and exterior doors are to be replaced, new units shall meet thermal values established by the Green Building Retrofit Checklist, windows shall be ENERGY STAR Certified for the climate.
4. Replacement glass shall comply with “safety glazing” in special hazardous locations
5. Electric wiring and equipment may be replaced with like materials except:
 - a. Replacement electrical receptacles shall comply with the electrical subcode.
 - b. Plug fuses shall be replaced with circuit breakers.
 - c. For replacement of non-grounding-type receptacles with grounding-type receptacles, the equipment grounding conductor shall be permitted to be connected in accordance with the electric code.
 - d. Frames of outlets, junction boxes, electric ranges, clothes dryers that are part of the branch circuit of the appliance may be

grounded to the grounded circuit conductor if all conditions of the electric Subcode are met.

6. Compliant accessible door hardware “lever type handles” are to be installed on all doors
7. Roofing work: Existing roof or roof covering shall be removed and replaced if the roof is currently 10 years old or older, the existing is asbestos-cement tile roof or the existing roof has two or more applications of any type of covering.

RENOVATION WORK

Renovation work is defined as “the removal and replacement or covering of existing interior or exterior finish, trim, doors, windows, or other materials with new materials that serve the same purpose and do not change the configuration of the space. Renovation shall include the replacement of equipment and fixtures: The following products and practices shall be required as applicable in addition to those listed above for a ‘repair’ condition.

1. Where a fireproofing material is removed, the material will be replaced to maintain the rating.
2. Air Sealing Building Envelope: Per Green Building Retrofit Checklist seal all accessible gaps and penetrations in the building envelope with low-VOC caulk or foam.
3. Air Barrier System - Ensure continuous unbroken air barrier surrounding all conditioned space and dwelling units. Align insulation completely and continuously with the air barrier.
 - a. When the work being performed exposes the roof decking / sheathing or the framing of any wall, floor ceiling or ceiling assembly that is part of the building thermal envelope, and accessible voids in the insulation shall be filled using insulation meeting the R-values of the IECC insulation requirements per the Green Building Retrofit Checklist
 - b. In the event that insulation meeting the R-value cannot be installed due to space constraints, insulation that fills the framing cavity shall be provided.
4. Ducts that are newly installed or replaced shall be insulated per the Green Building Retrofit Checklist. Ductwork shall be sealed at all seams to meet or exceed ENERGY STAR for Homes' duct leakage standard.

Additions

New foundations shall be considered an addition and all work in that portion of the dwelling shall comply with code for new construction.

ADDITIONAL CODE COMPLIANCE REQUIREMENTS

Regardless of whether the work is categorized as repair, renovation or an addition:

1. No work shall cause diminution of structural strength, system capacity or mechanical ventilation below the initial condition or code; whichever is less.
2. The replacement of fixture, equipment or appliances shall not increase the system load unless the system is upgraded to accommodate the additional load.
3. No work shall cause a dwelling to be less accessible when a barrier free condition is in place.
4. Wood paneling shall not be installed as a wall finish.
5. Carpet used on flooring shall meet DOC FF-1 "Pill Test" (Consumer Product Safety Commission (16 CFR 1630), and per the Green Building Retrofit Checklist any carpet products used must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives.
6. Electrical component shall be UL listed.
7. The following plumbing products shall not be used:
 - a. All-purpose solvent cement.
 - b. Clear polybutylene piping.
 - c. Flexible traps and tail pieces.
 - d. Sheet or tube copper or brass tailpiece fittings less than 17 gage.
 - e. Solder having more than .2 percent lead.
8. Bars, grilles or screens shall not be installed on egress windows unless they are readily removable without keys or special tools or force greater than it takes to open a window.
9. The following practices shall not be used on painted surfaces constructed prior to 1978 unless paint has been tested and found to be lead free:
 - a. Open flame burning or high temperature stripping (1100 degrees).
 - b. Power sanding or sandblasting unless HEPA filtered vacuum is used to contain dust.
 - c. Uncontained water blasting or power washing.
 - d. Dry scraping or sanding of more than 2 SF interior per room or 10 SF per building exterior.

UNIFORM PHYSICAL CONDITION STANDARDS (UPCS)

If the housing is occupied at the time of rehabilitation and upon completion, any life-threatening deficiencies must be identified and addressed immediately. See Appendix A for a list of Inspectable Items and Observable Deficiencies, including the identification of life-threatening deficiencies (highlighted in red) for the property site, building exterior, building systems, common areas, and units. The Uniform Physical Condition Standards (UPCS) are included as part of this Rehabilitation Standard. Homes not complying with these minimum standards will be upgraded to comply. A checklist derived from the UPCS standards is included herein as Appendix A. The checklist expands upon the UPCS standards with a series of questions that the assessor will use to determine if the

dwelling is meeting the standard. The checklist includes questions like 'are all beams sills and blocks free from termites or rot' and 'if the foundation is a slab is it free of cracks evidence in the interior or on the exposed exterior.

Additionally, the checklist incorporates other specific questions not directly related to the UPCS but included in the program for code compliance or general safe, decent and sanitary conditions. These items include:

Building Exterior

1. Is the foundation vented and insulated as needed
2. Electric service supply location
3. Electric service has a rating and a disconnect
4. Electric service has a minimum existing service of 100 amp
5. Disconnects for HVAC condensing unit should be located within reach of the unit
6. Exterior entrances should have a light fixture controlled from the interior
7. Other hazards not specifically noted elsewhere

Building Interior

1. Smoke detectors located per code
2. If accessible, does the attic have insulation
 - a. Are wiring connections in boxes or is wire exposed
3. Other hazards not specifically noted elsewhere

Kitchen

1. Condition of countertops, cabinets, cabinet doors and shelves
2. Shut off valves

Bath

1. Toilet shut off valve
2. Lavatory shut off valves

Plumbing and Heating

1. Fuel storage location and lines
2. Does water heater have a shut off valve for water and fuel
3. Does home have a master water shut off valve

PROJECT ARCHITECTURAL REHABILITATION DESIGN STANDARDS ACCESSIBILITY REQUIREMENTS

1. Housing that is reconstructed with HTF funds must meet all applicable federal and state regulations regarding accessibility for persons with disabilities. An overview of these requirements is provided below; however, the applicability of these rules is complex and therefore it is recommended that developers seeking HTF funds consult with a qualified design professional.

2. General Requirements:
 - a. Projects shall meet applicable Federal and State Regulations and Rules
 - b. The number of accessible apartment units shall be determined by the code requirements
 - c. Projects shall comply with the American's with Disabilities Act (ADA), Title II (for public entities) and Title III (for places of public accommodations) implemented at 24 CFR parts 35 and 36, and 2010 ADA Standard for Accessible Design and attendant Design Guide (DOJ), as applicable
 - d. Projects, if applicable, shall comply with the Fair Housing Act, which states in part that covered multifamily dwellings as defined by HUD's implementing regulations at 24 CFR 100.201 must meet the design requirements at 24 CFR 100.205
3. Projects shall comply with other standards as may apply or be required by funding sources
4. Projects, if applicable, shall comply with Section 504 of the Rehabilitation Act of 1973 implemented at 24 CFR Part 8
 - a. For reconstruction (projects with 15 or more total units and the cost of rehabilitation is 75% or more of the replacement cost):
 - i. 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
 - b. For projects with "less-than- Reconstruction" (anything less than "Reconstruction"), 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.

BUILDING DESIGN

1. The project developers are encouraged to draft an architectural program document outlining the goals for the project.
2. Building access – in general the access to a building shall be safe, logical, readily identifiable, sheltered from the weather, and meeting the exit requirements to a public way. Pathways of circulation within a building

shall also be safe and logical.

3. Means of egress shall be in conformance with NJUCC, including complete layout of the exits, corridor and stair dimensional requirements and arrangement, doors sizes and swings, door hardware, panic exit devices, door self-closers, interior finishes, walking surfaces, fire separations, stair enclosures, guards and railings, ramps, occupant load calculations, illumination, and signage.
4. Apartment layout:
 - a. Room sizes –minimum in accordance with NJUCC or local codes
 - b. Kitchens – in general, for apartment buildings – each unit will have a functional and code-compliant kitchen
 - c. Baths – in general, for apartment buildings – each unit will have a functional and code compliant bath
5. Storage – adequate clothes closets, pantry and general storage shall be provided.
6. Amenity Spaces - provision for laundry facilities, bike storage, trash & recycling, and other utility or common spaces may be made in accordance with the goals of the project program. The project developers are encouraged to consider adding such amenities as may be appropriate to enhance the livability of the housing for the tenants.
7. Solid Waste Disposal – provision shall be made to enable the tenants and property management staff to handle and store solid waste.
8. Existing outbuildings and utility structures which are being retained, shall be in sound and serviceable condition, and not create health, safety, or undue maintenance issues for the project.

CONSTRUCTION STANDARDS

- 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. New Jersey State Uniform Construction Code – current adopted edition
 - iii. New Jersey State Uniform Construction Code Subchapter 6. Rehabilitation Subcode
1. Drainage – assure that the grading surrounding the building will slope away from the building and drain properly, without ponding or erosion.

2. 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 30 years, or are covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
3. 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 30 years, or are covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
 - b. Assessor will verify that the dwelling has a main shut off valve at the point where water service enters the dwelling. Shut off valve shall be provided if it currently does not exist.
4. Vehicular access to public way – site design shall conform to local zoning regulations, as well as be sensible in its layout to maximize vehicular and pedestrian safety.
5. 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.
6. 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 and sound, 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.
7. 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.
8. Mailboxes - Provision will be made for USPS-approved cluster mailbox units if required by the USPS.
9. 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.

10. 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 may be provided and should be accessible as required by code.
11. Site lighting with shielded fixtures may be provided to illuminate parking and pedestrian walkways, and will conform to local zoning.
 - a. Energy efficient lighting shall conform to the HUD CPD Green Building Retrofit Checklist.
12. Fuel Storage – On site outdoor placement and storage of fuels per applicable regulations and utility requirements.
13. Underground or overhead utilities – as regulated by code and utility rules.

FOUNDATIONS

1. Existing foundations shall be examined by qualified professionals
 - 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. Basement floors:
 - a. Mechanical rooms - Provide sound concrete floors with raised housekeeping pads for equipment.
 - b. Tenant accessed utility spaces (storage, laundry rooms, etc.) – provide sound concrete floors.
5. No earthen floors are to remain, provide sound concrete floors
6. Moisture mitigation
 - a. Water and damproofing – where possible and as may be required by existing conditions of groundwater and stormwater intrusion into subsurface portions of buildings, provide waterproofing or damp proofing as appropriate.
 - b. Ventilation of basements and crawl spaces per NJUCC.

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. 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. Chimneys
 - a. Assure structural integrity, reconstruct, and point as necessary
 - b. If used for fuel heating appliances – provide lining as may be required by code and as prescribed by the heating appliance manufacturer.

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. 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.

ENCLOSURE - SHELL

1. Roofing
 - a. Existing
 - i. Roofing will be replaced if older than 10 years.
 - ii. Examine existing roofing and flashing systems to determine suitability for continued use. Continued life

expectancy of existing roofing should be a minimum of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.

- iii. Repair existing roofing as required. When repair is in excess of 30% replace roof.
 - iv. When more than 2 roofs are previously installed, all existing roofing shall be removed and new assembly will be provided.
- 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 of 30-lb. felt, ice & water shield self-adhesive membrane flashings, metal flashings and roofing.
 - Strip existing roofing and dispose of properly.
 - Examine exposed existing substrate for structural soundness
 - Install new roofing system per code, trade practices, and manufacturer specifications.
 - Flashings – deteriorated flashings shall be replaced, and the weather proof integrity of the roof system shall be assured.
- c. Ventilation
- i. Roof assemblies shall be properly ventilated in accordance with applicable code requirements.

2. Exterior Finishes

a. Cladding

- i. Wood Siding –
 - 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.
 - Siding shall be free of gaps and holes and provide continuous weatherproof system.
 - Repair or re-side as necessary to provide a weather resistant enclosure.
- ii. Masonry
 - Masonry bearing walls and veneers shall be restored as necessary
- iii. 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.

b. New wood trim shall be installed in a workmanlike manner.

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, assure 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

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 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.

a. Inspect structure for soundness and reconstruct any deteriorated members as required.

b. Install new support piers as may be required.

c. Patch existing decking with matching materials, or install new durable decking.

d. Railings shall be sound and adequately fastened to meet code

- requirements for structural loading. Repair or replace in-kind as appropriate.
- e. Railings shall meet code requirements for height of protective guards, or have supplemental guards installed.
- f. Steps shall be safe and sound and meet applicable codes, with railings as necessary.
- g. All porch elements shall be able to withstand the weather elements to prevent premature deterioration.

ENCLOSURE – THERMAL

1. Energy Efficiency - In general, most buildings will be rehabbed with a goal of increasing the thermal shell efficiency.
 - a. In both the design and implementation of project rehabilitation scopes of work, particular emphasis should be made to maximize the effectiveness of the energy efficiency related work scopes.
2. Insulation
 - b. Insulation levels shall conform to the NJUCC
 - c. Masonry walls shall be insulated utilizing current building science detailing to ensure ongoing integrity of masonry systems
 - d. General: All insulation to have a flame-spread rating of 25 maximum and a smoke- developed rating of 50 maximum. Installation of all insulation shall comply with Energy Star Grade 1.
 - e. Roof/Ceilings: Use formaldehyde free, un-faced, R-38 rolled fiberglass or mineral wool batt insulation or R-38 blown-in fiberglass or mineral wool insulation material. Provide insulation baffles at roof to accommodate venting. For attics with closed floor cavities directly above a conditioned space, blow in insulation as per manufacturers specifications to a min. density of 3.5 Lbs. per CF.
 - f. Exterior Walls: Use formaldehyde free, un-faced, R-13 fiberglass or mineral wool batt insulation material.
 - g. All voids around windows, exterior doors, and wall penetrations to be filled with foamed-in- place high density thermal insulation (poly cell). Do not use products containing Urea Formaldehyde.
 - h. Use baffles around all heat sources and at the plywood deck between the joists.
3. Indoor air quality
 - a. In general, all thermal upgrades to a building will take into consideration indoor air quality and moisture control/mitigation, and apply the current state of the art building science in this

regard. Treatment of existing stone, concrete or masonry basement walls, and of existing basement earthen floors or uninsulated basement slabs will be taken into consideration with regard to the need for moisture mitigation.

4. Ventilation
 - a. Venting of crawl spaces, attics and sloped ceilings shall be per code.

DOORS

1. General
 - a. Meet egress requirements for dimensions, swing and clearances, and be accessibility compliant as required.
 - b. Be sound and secure.
 - c. New doors shall be installed per manufacturers' recommendations and standard trade practice standards.
 - d. All doors shall be equipped with lever type handles.
 - e. Bathroom and bedroom doors shall be equipped with privacy locks.
 - f. Flash properly, and have shim spaces insulated.
 - g. Existing doors to remain should be examined and determined to be suitable for reuse with a remaining life after restoration of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
 - iv. Restore as required to provide useful life.
 - v. Shall be tested and modified as necessary to operate properly.
 - vi. Install new weather stripping and sweeps to provide seal against weather elements and air infiltration.
2. Apartment doors
 - a. Apartment 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

WINDOWS

1. All windows will be replaced if older than 5 years.
2. Windows shall be of legal egress size when required by code
 - a. Existing windows which are non-conforming egress size shall meet the Rehabilitation Subcode N.J.A.C 5:23-6
3. Existing windows:
4. Existing windows to remain should be examined and determined to be

suitable for reuse with a reasonable remaining life after restoration of 30 years without undue future maintenance, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.

- a. 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.
 - b. Install new weather stripping to provide seal against weather elements and air infiltration.
 - c. Air seal shim spaces and window weight pockets if possible.
 - d. Restore and modify as required to provide useful life.
 - e. Shall be tested and modified as necessary to operate smoothly and properly per code.
 - f. Hardware shall be intact and operational, or be replaced with new hardware as required
5. 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. Per the Green Building Retrofit Checklist new windows must be ENERGY STAR Certified for the climate.
 - c. All windows shall be installed per manufacturer's installation guidelines and specifications, and shall incorporate appropriate detail, flashings, joint sealers, and air sealing techniques.

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 30 years, or covered by the 20- year capital plan and/or subsequent 5-year updates during the 30-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.
- c. Environmentally Preferable Flooring:
 - i. When replacing flooring, use environmentally preferable flooring, including the FloorScore certification. Any carpet products used must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives.
 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. Reference may be made to AWI standards.
 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 painting including preparation of existing surfaces shall be done in a lead-safe manner.
 - a. Low/No VOC Paints and Primers:

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 – install in each apartment bath as appropriate.
3. Signage and identification – building signage shall be provided as appropriate:
4. Exit signage will be provided as required by code and be accessibility compliant as required.
5. Fire protection specialties – provide fire extinguishers in buildings, and in apartments as required by code and/or by state or local fire authorities.
6. Shelving – provide durable, cleanable shelving for pantries, linen closets, clothes closets and other storage as appropriate, securely fastened in place.

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 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30- year affordability period.
3. Kitchen appliances –

- a. Provide new, full-size (30", 4 burner) stove and refrigerator in each apartment.
 - 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 apartment units shall be accessibility compliant, and located in an arrangement providing required clear floor spaces.
4. Laundries –where adequate space is available and when appropriate to meet the project goals, washers and dryers may be provided in laundry rooms or in apartments.
 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.

FURNISHINGS - CASEWORK

1. Kitchen cabinetry and counters
 - a. Existing cabinetry and/or countertops proposed to remain shall be in good condition with a remaining useful life of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
 - b. New cabinetry
 - i. Shall be of good quality, Factory built pre-finished cabinets- Average grade particleboard box construction with simulated wood grain veneer on interior. Recessed panel doors, drawer fronts; face frames of hardwood construction; veneer/ply toe kicks. Hardware consists of concealed hinges and side mount drawer hardware
 - ii. New counters shall be provided with a cleanable sanitary surface material impervious to water such as high pressure laminate (HPL).
 - iii. Shop fabricated as one piece assembly where possible. Seal field joints.
 - iv. Installed level and securely fastened to cabinetry
 - c. Bath cabinetry and counters – vanity lavatory tops, when used, should be one piece integral bowl with integral backsplash

SPECIAL CONSTRUCTION

1. Hazardous materials and remediation –
2. Asbestos – project will be assessed for the existence of asbestos-containing building materials by qualified professionals:
 - a. National Emission Standards for Hazardous Air Pollutants (NESHAP) apply.

- b. Removal of asbestos shall be carried out per Federal EPA and State regulations and rules.
3. Lead - Health and Safety and Lead Safe Housing:
- a. Housing assisted with HTF funds are subject to the regulations at 24 CFR part 35, subparts A, B, J, K, and R. For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.
 - b. Lead-Based Paint
 - i. Federal and state regulations related to lead-based paint apply to target housing, which is defined as any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless a child of less than 6 years of age resides or is expected to reside in such housing for the elderly or persons with disabilities) or any zero-bedroom dwelling. Rehabilitation of target housing must be completed in a manner which insures the health and safety of workers and residents, especially children. A number of regulations apply when lead painted surfaces are disturbed in residential properties, primarily requiring the appropriate training of workers and the use of safe work practices. In some cases, use of federal funds for rehabilitation will trigger a higher level of lead paint treatments based on the amount of federal money being used. The following regulations must be adhered to during all rehabilitation of target housing:
 - ii. HUD Lead Safe Housing Rule (Title 24, Part 35) requires various levels of evaluation and treatment of lead paint hazards when federal money is used for rehabilitation of target housing. More information is available at: http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/enforcement/lshr
 - iii. EPA Renovation Repair and Painting Rule (40 CFR Part 745) – Requires contractors conducting renovation, repair or maintenance that disturbs paint in target housing or child-occupied facilities to be licensed by EPA and use lead-safe work practices to complete the work. Developers must ensure contractors are properly trained and licensed. More information is available at: <http://www2.epa.gov/lead>
 - iv. HUD/EPA Disclosure Regulations (Title 24, Part 35, Subpart A) – Requires owners of target housing to disclose all lead paint records and related information to potential buyers

and/or tenants. More information is available at:

http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_12347.pdf

- v. OSHA Lead in Construction Rule (29 CFR Part 1926.62) - Proscribes personal protection measures to be taken when workers are exposed to any lead during construction projects. More information is available at: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=106_41
- vi. State of NJ TITLE 5. COMMUNITY AFFAIRS CHAPTER 17. LEAD HAZARD EVALUATION AND ABATEMENT CODE - seeks to provide and ensure public safety, health, and welfare insofar as they are affected by the identification and abatement of lead-based paint hazards and controls the abatement of lead-based paint hazards and the certification of lead-based paint hazard evaluation or abatement contractors. More information is available at: http://www.state.nj.us/dca/divisions/codes/codreg/pdf_regs/njac_5_17.pdf

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.
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 30 years, or covered by the 20-year capital plan and/or subsequent 5- year updates during the 30-year affordability period, and approved by agencies having jurisdiction.

MECHANICAL

1. General:
 - a. All mechanical systems shall be designed by a mechanical engineer or other qualified professional.
 - b. Energy efficiency:
 - i. In both the design and implementation of project rehabilitation scopes of work, particular emphasis should be made to maximize the effectiveness of the energy efficiency related work scopes.
 - c. All mechanical systems shall meet all applicable codes:
 - d. Plumbing fixtures will be accessibility compliant as required
2. Fire protection

- a. In general, all buildings assisted with HTF funds shall have fire suppression as required by applicable codes with approved sprinkler systems installed as required
 - b. Where possible, piping for the sprinkler system shall be concealed.
3. Plumbing
- a. Hot water heaters (HWH) that are more than 10 years old or not High Efficiency Energy Star type will be replaced
 - b. HWH will be replaced if rust stains or damage is noted.
 - c. A fuel shut off valve shall be provided adjacent to the unit if none currently exists.
 - d. A supply water and output water valve shall be provided to the unit if none currently exists.
 - e. 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 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period. Substandard or critical non-code compliant components shall be replaced.
 - f. All toilets and fixtures are to be replaced with water-conserving fixtures per the HUD CPD Green Building Retrofit Checklist.
 - g. All fixtures, piping fittings and equipment shall be lead-free.
 - h. Three and four-bedroom apartments are encouraged to be designed to include 1½ baths minimum where adequate space is available.
 - i. Provision for laundry rooms or laundry hook-ups may be made per project's program requirements.
 - j. Provision for other utility plumbing including but not limited to janitor sinks, floor drains, outdoor faucets, drains for dehumidification systems, etc., may be made as desired or required.
4. Heating and Air Conditioning
- a. Furnace or Boiler that is more than 10 years old or not High Efficiency Energy Star type will be replaced
 - b. Condensing units that are more than 10 years old or not High Efficiency Energy Star type will be replaced. Electric disconnect shall be located within reach of the unit. Relocation of disconnect shall be acceptable if present and in good condition. If missing, will be provided.
 - c. 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 30 years, or covered by the 20-year capital

- plan and/or subsequent 5-year updates during the 30-year affordability period.
- d. Temperature control - The temperature in each apartment shall be individually thermostatically controlled.
 - e. Provide adequate heat in common spaces.
 - f. Install pipe insulation with minimum 1.5" wall thickness

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 be comply with all the applicable codes
4. In general, the electrical system should be in good condition, code compliant and have a remaining useful life of a minimum of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
5. Service Panel:
 - a. Knob and tube fuse panels shall be replaced with circuit breakers.
 - b. Service panes of less than 100 amps (w/o an air conditioning load) or 150 amps (with an air conditioning load) shall be replaced with 200 amp service.
 - c. Service panels with 10 or fewer circuits will be replaced with new panels (30 circuits).
 - d. Circuit breakers shall be arc fault type when required by code.
 - e. Existing service panels without a main disconnect shall be provided with a separate disconnect switch up stream of the panel.
6. Receptacles:
 - a. Each room shall have a minimum of two remote convenience receptacles or one receptacle and an overhead light controlled by a switch. Habitable rooms over 120SF shall have a minimum of three remote convenience receptacles.
 - b. Rooms lacking the above shall be provided with additional receptacles.
 - c. Receptacles within 6 ft. of a water source shall be GFI.
 - d. Exterior receptacles shall be GFI and exterior housed.

- e. All heavy duty appliances shall be provided with dedicated outlets and separate circuits.

NJDCA Housing Trust Fund Rehabilitation Standards Appendix A:

Uniform Physical Condition Standards for Housing Rehabilitation - October 2016

NJCA HTF Rehab Standards Appendix A: Uniform Physical Condition Standards for Housing Rehabilitation - October 2016

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

Site Requirements

Inspectable Item	Observable Deficiency	Type and Degree of Deficiency that must be addressed
Fencing and Gates	Damaged/Falling/Leaning	Fence/gate is missing or damaged to the point it exhibits no functionality
	Holes	Hole in the fence/gate exist that is larger than 6 inches by 6 inches
	Missing Sections	Exterior fence or security gate is missing a section large enough to compromise safety or security
Grounds	Erosion/Cutting Areas	Runoff has extensively displaced soils which has caused visible damage or compromises adjoining structures, threatens the safety of pedestrians or makes the land unusable
	Overgrown/Penetrating Vegetation	Vegetation has visibly damaged, rendered inoperable or severely compromised a component, area or system of the property
	Ponding/Site Drainage	Accumulation of water more than 3 inches deep and/or 20% or more grounds is unusable due to poor drainage or ponding
Health & Safety	Air Quality - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	Air Quality - Propane/Natural Gas/Methane Gas Detected	Detecable odor of propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled
	Electrical Hazards - Exposed Wires/Open Panels	Exposed bare wires or openings in electrical panels (capped wires do not pose a risk)
	Electrical Hazards - Water Leaks on/near Electrical Equipment	Water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion
Hazards - Other	Flammable Materials - Improperly Stored	Improperly stored flammable materials, displaying the potential exposure to risk of explosion or fire
	Garbage and Debris - Outdoors	Garbage accumulation exceeds planned storage area capacity, or garbage stored unauthorized area for storing garbage/debris
	Hazards - Other	General defects or hazards that expose occupants to the risk of bodily injury
	Hazards - Sharp Edges	Physical defect that could cause laceration breaking human skin or other bodily harm
	Hazards - Tripping	Physical defect in common areas or other travelled areas that exposes occupants to tripping risks
	Infestation - Insects	Evidence of roach infestation within a room, food preparation area, storage area, bathroom, or common area substantial enough to present a health and safety risk
	Infestation - Rats/Mice/Vermin	Evidence of rats or mice sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk
Mailboxes/Project Signs	Mailbox Missing/Damaged	Mailbox is missing or damaged to the point that it is unable to secure mail
	Signs Damaged	The project sign is illegible due to deterioration or damage
Parking Lots/Driveways/Roads	Cracks	Large cracks that impede traffic, or cracks that exist on more than 5% of the property's parking lots/driveways/roads or pose a safety hazard
	Ponding	Accumulation of 3 inches or more of water rendering more than 3% of a parking lot/driveway unusable or unsafe
	Potholes/Loose Material	Potholes/ loose material has either made parking lot/driveway unusable/impassable for vehicles and/or pedestrians due to tripping hazards
	Settlement/Heaving	Settlement/heaving has made a parking lot/driveway unusable/unpassable or creates unsafe conditions for pedestrians and vehicles
Play Areas and Equipment	Damaged/Broken Equipment	20% or more of the equipment is broken or does not operate as it should or any item that poses a safety risk
	Deteriorated Play Area Surface	20% or more of the play surface area shows deterioration or the play surface area presents the possibility of tripping hazards
Refuse/Disposal	Broken/Damaged Enclosure/Inadequate Outside Storage	A single wall or pane of the enclosure has collapsed, is leaning, or in danger of falling and trash cannot be stored in the designated area due to lack of storage capacity
Retaining Walls	Damaged/Falling/Leaning	A retaining wall is damaged and does not function as it should and is a safety risk
Storm Drainage	Damaged/Obstructed	The system is partially or fully obstructed by a large quantity of debris, causing backup into unintended adjacent areas and/or runoffs
Walkways/Steps	Broken/Missing Hand Railing	The hand rail is missing, damaged, unsecure or otherwise unusable
	Cracks/Settlement/Heaving	Cracks or missing sections that affect traffic ability over 5% or more of the property's walkways/steps or any defect that creates a tripping hazard
	Spalling/Exposed rebar	5% or more of walkways have large areas of spalling—larger than 4 inches by 4 inches—that affects traffic ability

Building Exterior Requirements

Inspectable Item	Observable Deficiency	Type and Degree of Deficiency that must be addressed
Doors	Damaged Frames/Threshold/Lintels/Trim	Door that is not functioning or cannot be secured due to damage of the frame, threshold, lintel or trim
	Damaged Hardware/Locks	Door that does not function as it should or cannot be secured due to damage of the door's hardware
	Damaged Surface (Holes/Paint/Rusting/Glass)	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
	Damaged/Missing Screen/Storm/Security Door	Screen door or storm door that is missing, not functioning, damaged or missing screens or glass
	Deteriorated/Missing Caulking/Seals	The seals/caulking is missing on entry door, or deteriorated to the point not functioning
Fire Escapes	Blocked Egress/Ladders	Stored items or other barriers restrict or block people from exiting
	Visibly Missing Components	Functional components that affect the function of the fire escape—one section of a ladder or railing, for example—are missing
Foundations	Cracks/Gaps	Cracks in foundation more than 3/8 inches wide by 3/8 inches deep by 6 inches long may exhibit signs of a serious structural deficiencies or opportunity for water infiltration
	Spalling/Exposed Rebar	Significant spalled areas affecting more than 10% of any foundation wall or any exposed reinforcing material—rebar or other
Health and Safety	Electrical Hazards - Exposed Wires/Open Panels	Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)
	Electrical Hazards - Water Leaks on/near Electrical Equipment	Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion
	Emergency Fire Exits - Emergency/Fire Exits	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
	Emergency Fire Exits - Missing Exit Signs	Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign
	Flammable/Combustible Materials - Improperly Stored	Improperly stored flammable materials, displaying the potential exposure to risk of explosion or fire
	Garbage and Debris - Outdoors	Garbage accumulation exceeds planned storage area capacity, or garbage stored unauthorized area for storing garbage/debris
Hazards - Other	Hazards - Other	Any general defects or hazards that expose occupants to the risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause laceration breaking human skin or other bodily harm
	Hazards - Tripping	Any physical defect in common areas or other travelled areas that exposes occupants to tripping risks
	Infestation - Insects	Evidence of roach infestation within a room, food preparation area, storage area, bathroom, or common area substantial enough to present a health and safety risk

	Infestation - Rats/Mice/Vermin	Evidence of rats or mice--sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk
Lighting	Broken Fixtures/Bulbs	More than 10% of the lighting fixtures and bulbs are broken or missing
Roofs	Damaged Soffits/Fascia	Soffits or fascia are missing or damaged and the possibility of water penetration is visible
	Damaged Vents	Vents are missing or visibly damaged presenting the possibility further roof damage
	Damaged/Clogged Drains	The drain is damaged or partially clogged with debris or the drain no longer functions
	Damaged/Torn Membrane/Missing Ballast	Ballast no longer functional or damage to the roof membrane may result in water penetration
	Missing/Damaged Components from Downspout/Gutter	Drainage system components are missing or damaged causing visible damage to the roof, structure, exterior wall surface, or interior
	Missing/Damaged Shingles	Roofing shingles are damaged or missing, creating the risk of water penetration
	Ponding	Evidence of standing water on roof causing potential or visible damage to roof surface or underlying materials
Walls	Cracks/Gaps	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
	Damaged Chimneys	The entire chimney's section of the chimney is visibly separated from the adjacent wall or large cracked/missing pieces signaling chimney failure, creating a safety hazard
	Missing/Damaged Caulking/Mortar	Exterior wall caulking/mortar deterioration that presents a risk of water penetration or structural damage
	Missing Pieces/Holes/Spalling	Exterior wall deterioration/holes of any size that present a risk of water penetration or structural damage
	Stained/Peeling/Needs Paint	20% or more of the exterior paint is peeling/missing and siding surface is exposed presenting the opportunity for water penetration and deterioration
Windows	Broken/Missing/Cracked Panes	Any missing panes of glass or panes of glass with crack that is 4" or greater and/or substantial enough to impact the structural integrity of the window pane
	Damaged Sills/Frames/Intels/Trim	Sills, frames, lintels, or trim are missing or damaged, exposing the inside of the surrounding walls and compromising its weather tightness
	Damaged/Missing Screens	Screens are missing or exhibit holes greater than 1 inch by 1 inch or tears greater 2 inches or greater in length
	Missing/Deteriorated Caulking/Seals/Glazing Compound	Missing or deteriorated caulk or seals exist, with evidence of leaks or damage to the window or surrounding structure
	Peeling/Needs Paint	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
	Security Bars Prevent Egress	The ability to exit through egress window is limited by malfunctioning security bars that pose safety risks

Building Systems Requirements

Inspectable Item	Observable Deficiency	Type and Degree of Deficiency that must be addressed
Domestic Water	Leaking Central Water Supply	Leaking water from water supply line is observed
	Missing Pressure Relief Valve	The pressure relief valve is missing or defective pressure relief valve improperly drains water
	Rust/Corrosion on Heater Chimney	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
	Water Supply Inoperable	There is no running water in any area of the building
Electrical System	Blocked Access/Improper Storage	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Evidence of Leaks/Corrosion	Corrosion affecting the condition of current carrying components, any stains or rust on the interior of electrical enclosures, or any evidence of water leaks in the enclosure/hardware
	Frayed Wiring	Nicks, abrasions, or fraying of the insulation that exposes any conducting wire
	Missing Breakers/Fuses	Any exposed breaker port
	Missing Outlet Covers	Outlet cover is missing, results in exposed visible electrical connections
Elevators	Not Operable	The elevator does not function at all or the elevator doors open when the cab is not there
Emergency Power	Auxiliary Lighting Inoperable (if applicable)	Auxiliary lighting does not function
Fire Protection	Missing Sprinkler Head	Sprinkler head is missing, disabled, painted over, blocked, or capped
	Missing/Damaged/Expired Extinguishers	Missing, damaged or expired fire extinguisher in any area of the building where a fire extinguisher is required
Health & Safety	Air Quality - Mold and/or Mildew Observed	Evidence of mold or mildew is observed that is substantial enough to pose a health risk
	Air Quality - Propane/Natural Gas/Methane Gas Detected	Propane, natural gas or methane odors that pose a risk of explosion/fire and/or pose a health risk if inhaled
	Air Quality - Sewer Odor Detected	Sewer odors that pose a health risk, if inhaled
	Electrical Hazards - Exposed Wires/Open Panels	Exposed bare uncapped wires or openings in electrical panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment	Water leak accumulation in close proximity to any electrical apparatus pose a risk of fire, electrocution or explosion
	Elevator - Tripping	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
	Emergency Fire Exits - Emergency/Fire Exits	Exit is obstructed or limited due to a egress door/window being nailed shut, a malfunctioning lock, chained panic hardware, or any other conditions that block the exit
	Emergency Fire Exits - Missing Exit Signs	Exit signs are either not illuminated or missing
	Flammable Materials - Improperly Stored	Improperly stored flammable materials, displaying the potential exposure to risk of explosion or fire
	Garbage and Debris - Indoors	Garbage accumulation exceeds planned storage area capacity, or garbage stored unauthorized area for storing garbage/debris
Hazards - Other	Any general defects or hazards that expose occupants to the risk of bodily injury	
Hazards - Sharp Edges	Physical defect that could cause laceration breaking human skin or other bodily harm	

	Hazards - Tripping Hazards	Physical defect in common areas or other travelled areas that exposes occupants to tripping risks
	Infestation - Insects	Evidence of insect infestation within a room, food preparation area, storage area, bathroom, or common area substantial enough to present a health and safety risk
	Infestation - Rats/Mice/Vermin	Evidence of rats or mice - sightings, rat or mouse holes, or droppings substantial enough to present a health and safety risk
HVAC	Boiler/Pump Leaks	Evidence of water or steam leaking in piping or pump packing
	Fuel Supply Leaks	Evidence of any amount of fuel leaking from the supply tank or piping
	General Rust/Corrosion	Significant formations of metal oxides, significant flaking, discoloration, or the development of a noticeable pit or crevice
	Misaligned Chimney/Ventilation System	A misalignment of an exhaust system on a combustion fuel-fired unit (oil, natural gas, propane, wood pellets etc.) that caused improper or dangerous venting of gases
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable	Malfunctioning roof exhaust fan
Sanitary System	Broken/Leaking/Clogged Pipes or Drains	Evidence of clogged drains or active leaks in or around the system components, standing water, puddles or ponding
	Missing Drain/Cleanout/Manhole Covers	A protective cover is missing
Common Area Requirements		
Inspectable Item	Observable Deficiency	Type and Degree of Deficiency that must be addressed
Basement/Garage/Carport	Baluster/Side Railings - Damaged	Any damaged/missing balusters or side rails that limit the safe use of an area
Closet/Utility/Mechanical	Cabinets - Missing/Damaged	10% or more of cabinet, doors, or shelves are missing or the laminate is separating
Community Room	Call for Aid - Inoperable	The system does not function
Halls/Corridors/Stairs	Ceiling - Holes/Missing Tiles/Panels/Cracks	Holes in ceiling, missing tiles or large cracks wider than 1/4 of an inch and greater than 11 inches long
Kitchen	Ceiling - Peeling/Needs Paint	More than 10% of ceiling has peeling/missing paint
Laundry Room	Ceiling - Water Stains/Water Damage/Mold/Mildew	Visible evidence of a leak in the ceiling, such as dark spots resulting from the existence mold/mildew on an surface area greater than 1 square foot
Lobby	Countertops - Missing/Damaged	10% or more of the countertop working surface is missing, deteriorated, or damaged below the laminate (unsanitary food preparation location)
Office	Dishwasher/Garbage Disposal - Inoperable	The dishwasher or garbage disposal does not operate as it should
Other Community Spaces	Doors - Damaged Frames/Threshold/Lintels/Trim	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	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)	Door that has a hole 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	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 or severely deteriorated on the entry doors
	Doors - Missing Door	Door is missing that is required for the functional use of the space
	Dryer Vent - Missing/Damaged/Inoperable	The dryer vent is missing or not functioning due to obstruction. Dryer exhaust does not effectively vent air to the outside
	Electrical - Blocked Access to Electrical Panel	One or more fixed items of sufficient size and weight impede access to the building electrical panel
	Electrical - Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Electrical - Evidence of Leaks/Corrosion	Corrosion that affects the condition of the current carrying components, stain/rust on the interior of electrical enclosures or evidence of water leaks in the enclosure or hardware
	Electrical - Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes conducting wire
	Electrical - Missing Breakers	Open and/or exposed breaker port
	Electrical - Missing Covers	A cover is missing electrical connections are exposed
	Floors - Bulging/Buckling	Flooring that is bulging, buckling, sagging or unaligned
	Floors - Floor Covering Damaged	10% or more of the floor covering has stains, surface burns, shallow cuts, holes, tears, loose areas or exposed seams
	Floors - Missing Floor Tiles	5% of more of the flooring tile flooring is missing
	Floors - Peeling/Needs Paint	Painted flooring that exhibits evidence of peeling or missing paint on 10% or more of the surface
	Floors - Rot/Deteriorated Subfloor	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	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, discoloration, pits or crevice
	HVAC - Inoperable	HVAC does not function. It does not provide the heating/cooling and 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 is missing, inoperable or has extensive discoloration/cracks in over 50% of the basin, the sink or associated hardware

	Lighting-Missing/Damaged/Inoperable Fixture	More than 10% of the permanent lighting fixtures are missing or damaged so they do not function
	Mailbox - Missing/Damaged	The U.S. Postal Service mailbox cannot be locked or is missing
	Outlets/Switches/Cover Plates - Missing/Broken	Outlet or switch is missing or a cover plate is missing or broken, resulting in exposed wiring
	Pedestrian/Wheelchair Ramp	A walkway or ramp is damaged and cannot be used by people on foot, in wheelchair, or using walkers
	Plumbing - Clogged Drains	Drain is substantially or completely clogged or has suffered extensive deterioration
	Plumbing - Leaking Faucet/Pipes	A steady leak that is adversely affecting the surrounding area
	Range Hood/Exhaust Fans - Excessive Grease/Inoperable	A substantial accumulation of dirt or grease that threatens the free passage of air
	Range/Stove - Missing/Damaged/Inoperable	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
	Refrigerator - Damaged/Inoperable	The refrigerator has an extensive accumulation of ice or the seals around the doors are deteriorated in a way which substantially impacts its performance
	Restroom Cabinet - Damaged/Missing	Damaged or missing shelves, vanity top, drawers, or doors that are not functioning as they should for storage or their intended purpose
	Shower/Tub - Damaged/Missing	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
	Sink - Missing/Damaged	Any cracks in sink through which water can pass or extensive discoloration over more than 10% of the sink surface or sink is missing
	Smoke Detector - Missing/Inoperable	Smoke detector is missing or does not function as it should
	Stairs - Broken/Damaged/Missing Steps	A step is missing or broken
	Stairs - Broken/Missing Hand Railing	The hand rail is missing, damaged, unsecure or otherwise unusable
	Ventilation/Exhaust System - Inoperable	exhaust fan is not functioning or window designed for ventilation does not open
	Walls - Bulging/Buckling	Bulging, buckling or sagging walls or a lack of horizontal alignment
	Walls - Damaged	Any hole in wall greater than 2 inches by 2 inches
	Walls - Damaged/Deteriorated Trim	10% or more of the wall trim is damaged
	Walls - Peeling/Needs Paint	10% or more of interior wall paint is peeling or missing
	Walls - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew—such as a common area—covering a wall area greater than 1 foot square
	Water Closet/Toilet - Damaged/Clogged/Missing	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
	Windows - Cracked/Broken/Missing Panes	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 window pane
	Windows - Damaged Window Sill	The sill is damaged enough to expose the inside of the surrounding walls and compromise its weather tightness
	Windows - Inoperable/Not Lockable	Any window that is not functioning or cannot be secured because lock is broken
	Windows - Missing/Deteriorated Caulking/Seals/Glazing	There are missing or deteriorated caulk or seals—with evidence of leaks or damage to the window or surrounding structure
	Windows - Peeling/Needs Paint	More than 10% of interior window paint is peeling or missing
	Windows - Security Bars Prevent Egress	The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks
Health & Safety	Air Quality - Mold and/or Mildew Observed	Evidence of mold or mildew is observed that is substantial enough to pose a health risk
	Air Quality - Propane/Natural Gas/Methane Gas Detected	Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled
	Air Quality - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	Electrical Hazards - Exposed Wires/Open Panels	Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)
	Electrical Hazards - Water Leaks on/near Electrical Equipment	Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion
	Emergency Fire Exits - Emergency/Fire Exits	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
	Emergency Fire Exits - Missing Exit Signs	Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign
	Flammable/Combustible Materials - Improperly Stored	Flammable or combustible materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Indoors	Garbage accumulation exceeds planned storage area capacity, or garbage stored in unauthorized area for storing garbage/debris
	Garbage and Debris - Outdoors	Garbage accumulation exceeds planned storage capacity, or garbage stored in unauthorized area for storing garbage/debris
	Hazards - Other	General defects or hazards that expose occupants to the risk of bodily injury
	Hazards - Sharp Edges	Physical defect that could cause laceration breaking human skin or other bodily harm
	Hazards - Tripping	Physical defect in common areas or other travelled areas that exposes occupants to tripping risks
	Infestation - Insects	Evidence of insect infestation within a room, food preparation area, storage area, bathroom, or common area substantial enough to present a health and safety risk
	Infestation - Rats/Mice/Vermin	Evidence of rats or mice—sightings, rat or mouse holes, or droppings—substantial enough to present a health and safety risk
Pools and Related Structures	Fencing - Damaged/Not Intact	Damage that could compromise the integrity of the fence
Trash Collection Areas	Chutes - Damaged/Missing Components	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

Unit Requirements

<i>Inspectable Item</i>	<i>Observable Deficiency</i>	<i>Type and Degree of Deficiency that must be addressed</i>
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 (if applicable)	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	<i>Carbon residue, melted breakers or arcing scars are evident</i>
	Evidence of Leaks/Corrosion	<i>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</i>
	Frayed Wiring	<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	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>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>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	<i>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>Improperly stored flammable materials, displaying the potential exposure to risk of explosion or fire</i>
	Garbage and Debris - Indoors	<i>Garbage accumulation exceeds planned storage area capacity, or garbage stored unauthorized area for storing garbage/debris</i>
	Garbage and Debris - Outdoors	<i>Garbage accumulation exceeds planned storage area capacity, or garbage stored unauthorized area for storing garbage/debris</i>
	Hazards - Other	<i>General defects or hazards that expose occupants to the risk of bodily injury</i>
	Hazards - Sharp Edges	<i>Physical defects that could cause laceration breaking human skin or other bodily harm</i>
	Hazards - Tripping	<i>Physical defects in common areas or other travelled areas that exposes occupants to tripping risks</i>
	Infestation - Insects	<i>Evidence of insect infestation within a room, food preparation area, storage area, bathroom, or common area 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	Any misalignment that may cause improper or dangerous venting of gases
	Inoperable Unit/Components	Hot water from hot water taps is no warmer than room temperature indicating hot water heater is not functioning properly
	Leaking Valves/Tanks/Pipes	Evidence of active water leaks from hot water heater or related components
	Pressure Relief Valve Missing	No pressure relief valve or pressure relief valve does not drain down to the floor
	Rust/Corrosion	Significant formations of metal oxides, flaking, or discoloration--or a pit or crevice
HVAC System	Convection/Radiant Heat System Covers Missing/Damaged	Cover is missing or substantially damaged, allowing contact with heating/surface elements or associated fans
	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
	Misaligned Chimney/Ventilation System	Any misalignment that may cause improper or dangerous venting of gases
	Noisy/Vibrating/Leaking	The HVAC system shows signs of abnormal vibrations, other noise, or leaks when engaged
	Rust/Corrosion	Deterioration from rust or corrosion on the HVAC system in the dwelling unit
Kitchen	Cabinets - Missing/Damaged	10% or more of cabinet, doors, or shelves are missing or the laminate is separating
	Countertops - Missing/Damaged	10% or more of the countertop working surface is missing, deteriorated, or damaged below the laminate -- not a sanitary surface to prepare food
	Dishwasher/Garbage Disposal - Inoperable	The dishwasher or garbage disposal does not operate as it should
	Plumbing - Clogged Drains	Drain is substantially or completely clogged or has suffered extensive deterioration
	Plumbing - Leaking Faucet/Pipes	A steady leak that is adversely affecting the surrounding area
	Range Hood/Exhaust Fans - Excessive Grease/Inoperable	A substantial accumulation of dirt or grease that threatens the free passage of air
	Range/Stove - Missing/Damaged/Inoperable	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
	Refrigerator - Missing/Damaged/Inoperable	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
	Sink - Damaged/Missing	Any cracks in sink through which water can pass or extensive discoloration over more than 10% of the sink surface or sink is missing
Laundry Area (Room)	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
Lighting	Missing/Inoperable Fixture	A permanent light fixture is missing or not functioning, and no other switched light source is functioning in the room
Outlets/Switches	Missing	An outlet or switch is missing
	Missing/Broken Cover Plates	An outlet or switch has a broken cover plate over a junction box or the cover plate is missing
Patio/Porch/Balcony	Baluster/Side Railings/Damaged	Any damaged or missing balusters or side rails that limit the safe use of an area
Smoke Detector	Broken/Damaged/Missing Steps	A step is missing or broken
	Missing/Inoperable	Smoke detector is missing or does not function as it should
Stairs	Broken/Missing Hand Railing	The hand rail is missing, damaged, unsecured or otherwise unusable
	Bulging/Buckling	Bulging, buckling or sagging walls or a lack of horizontal alignment
Walls	Damaged	Hole in wall greater than 2 inches by 2 inches
	Damaged/Deteriorated Trim	10% or more of the wall trim is damaged
	Peeling/Needs Paint	10% or more of interior wall paint is peeling or missing
	Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew covering a wall area greater than 1 foot square
	Cracked/Broken/Missing Panes	Missing/cracked panes of glass in which the crack is either greater than 4" and/or substantial enough to impact the structural integrity of the window pane
Windows	Damaged Window Sill	The sill is damaged enough to expose the inside of the surrounding walls and compromise its weather tightness
	Missing/Deteriorated Caulking/Seals/Glazing Compound	There are missing or deteriorated caulk or seals--with evidence of leaks or damage to the window or surrounding structure
	Inoperable/Not Lockable	Any window that is not functioning or cannot be secured because lock is broken
	Peeling/Needs Paint	More than 10% of interior window paint is peeling or missing
	Security Bars Prevent Egress	The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks

Appendix B: HUD CPD Green Building Retrofit Checklist

HUD CPD Green Building Retrofit Checklist

The CPD Green Retrofit Checklist promotes energy efficiency and green building practices for residential retrofit projects. Grantees must follow the checklist in its entirety and apply all measures within the Checklist to the extent applicable to the particular building type being retrofitted. The phrase "when replacing" in the Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.

WATER AND ENERGY CONSERVATION MEASURES

- Water-Conserving Fixtures**
Install or retrofit water conserving fixtures in any unit and common facility, use the following specifications: Toilets-- 1.28 gpf; Urinals-- 0.5 gpf; Showerheads-- 2.0 gpm; Kitchen faucets-- 2.0 gpm; and Bathroom faucets-- 1.5gpm. [gpf = gallons per flush; gpm = gallons per minute]
- ENERGY STAR Appliances**
Install ENERGY STAR-labeled clothes washers, dishwashers, and refrigerators, if these appliance categories are provided in units or common areas.
- Air Sealing: Building Envelope**
Seal all accessible gaps and penetrations in the building envelope. If applicable, use low VOC caulk or foam.
- Insulation: Attic (if applicable to building type)**

For attics with closed floor cavities directly above the conditioned space, blow in insulation per manufacturer's specifications to a minimum density of 3.5 Lbs. per cubic foot (CF). For attics with open floor cavities directly above the conditioned space, install insulation to meet or exceed IECC levels.
- Insulation: Flooring (if applicable to building type)**
Install \geq R-19 insulation in contact with the subfloor in buildings with floor systems over vented crawl spaces. Install a 6-mil vapor barrier in contact with 100% of the floor of the crawl space (the ground), overlapping seams and piers at least 6 inches.
- Duct Sealing (if applicable to building type)**

In buildings with ducted forced-air heating and cooling systems, seal all penetrations of the air distribution system to reduce leakage in order to meet or exceed ENERGY STAR for Homes' duct leakage standard.
- Air Barrier System**
Ensure continuous unbroken air barrier surrounding all conditioned space and dwelling units. Align insulation completely and continuously with the air barrier.
- Radiant Barriers: Roofing**
When replacing or making a substantial repair to the roof, use radiant barrier sheathing or other radiant barrier material; if economically feasible, also use cool roofing materials.
- Windows**
When replacing windows, install geographically appropriate ENERGY STAR rated windows.
- Sizing of Heating and Cooling Equipment**
When replacing, size heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals, Parts J and S, or 2012 ASHRAE Handbook--HVAC Systems and Equipment or most recent edition.

- Domestic Hot Water Systems**
When replacing domestic water heating system(s), ensure the system(s) meet or exceed the efficiency requirements of ENERGY STAR for Homes' Reference Design. Insulate pipes by at least R-4.
- Efficient Lighting: Interior Units**
Follow the guidance appropriate for the project type: install the ENERGY STAR Advanced Lighting Package (ALP); *OR* follow the ENERGY STAR MFHR program guidelines, which require that 80% of installed lighting fixtures within units must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; *OR* when replacing, new fixtures and ceiling fans must meet or exceed ENERGY STAR efficiency levels.
- Efficient Lighting: Common Areas and Emergency Lighting** (if applicable to building type)
Follow the guidance appropriate for the project type: use ENERGY STAR-labeled fixtures or any equivalent high-performance lighting fixtures and bulbs in all common areas; *OR* when replacing, new common space and emergency lighting fixtures must meet or exceed ENERGY STAR efficiency levels. For emergency lighting, if installing new or replacing, all exist signs shall meet or exceed LED efficiency levels and conform to local building codes.
- Efficient Lighting: Exterior**
Follow the guidance appropriate for the project type: install ENERGY STAR-qualified fixtures or LEDs with a minimum efficacy of 45 lumens/watt; *OR* follow the ENERGY STAR MFHR program guidelines, which require that 80% of outdoor lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; *OR* when replacing, install ENERGY STAR compact fluorescents or LEDs with a minimum efficacy of 45 lumens/watt.

INDOOR AIR QUALITY

- Air Ventilation: Single Family and Multifamily** (three stories or fewer)
Install an in-unit ventilation system capable of providing adequate fresh air per ASHRAE 62.2 requirements.
- Air Ventilation: Multifamily** (four stories or more)
Install apartment ventilation systems that satisfy ASHRAE 62.2 for all dwelling units and common area ventilation systems that satisfy ASHRAE 62.1 requirements. If economically feasible, consider heat/energy recovery for 100% of corridor air supply.
- Composite Wood Products that Emit Low/No Formaldehyde**
Composite wood products must be certified compliant with California 93120. If using a composite wood product that does not comply with California 93120, all exposed edges and sides must be sealed with low-VOC sealants.
- Environmentally Preferable Flooring**
When replacing flooring, use environmentally preferable flooring, including the FloorScore certification. Any carpet products used must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives.
- Low/No VOC Paints and Primers**
All interior paints and primers must be less than or equal to the following VOC levels: Flats--50 g/L; Non-flats--50 g/L; Floor--100 g/L. [g/L = grams per liter; levels are based on a combination of the Master Painters Institute (MPI) and GreenSeal standards.]
- Low/No VOC Adhesives and Sealants**
All adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks and sealants must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District.

- Clothes Dryer Exhaust**
Vent clothes dryers directly to the outdoors using rigid-type duct work.
- Mold Inspection and Remediation**
Inspect the interior and exterior of the building for evidence of moisture problems. Document the extent and location of the problems, and implement the proposed repairs according to the Moisture section of the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.
- Combustion Equipment**
When installing new space and water-heating equipment, specify power-vented or direct vent combustion equipment.
- Mold Prevention: Water Heaters**
Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling.
- Mold Prevention: Surfaces**
When replacing or repairing bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.
- Mold Prevention: Tub and Shower Enclosures**
When replacing or repairing tub and/or shower enclosures, use non-paper-faced backing materials such as cement board, fiber cement board, or equivalent in bathrooms.
- Integrated Pest Management**
Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate sealing methods to prevent pest entry. [If applicable, provide training to multifamily buildings staff.]
- Lead-Safe Work Practices**
For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.
- Radon Testing and Mitigation** (if applicable based on building location)

For buildings in EPA Radon Zone 1 or 2, test for radon using the current edition of American Association of Radon Scientists and Technologists (AARST)'s Protocols for Radon Measurement in Homes Standard for Single-Family Housing or Duplexes, or AARST's Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings. To install radon mitigation systems in buildings with radon level of 4 pCi/L or more, use ASTM E 2121 for single-family housing or duplexes, or AARST's Radon Mitigation Standards for Multifamily Buildings. For new construction, use AARST's Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses, or ASTM E 1465.