

# Vermont Housing & Conservation Board

## National Housing Trust Fund Rehabilitation Standards

### I. PURPOSE OF STANDARDS

- A. The National Housing Trust Fund Rehabilitation Standards (known herein as the “HTF Standards”) are designed to outline the requirements for building rehabilitation for all VHCB National Housing Trust Fund (HTF) funded multi-family housing projects. The HTF Standards are applicable to all VHCB HTF-funded rehabilitation projects. The HTF Standards, though a requirement specifically to the development entity in direct receipt of VHCB HTF funding, are written to provide guidance to all relevant members of a project development team.
- B. The goal of the VHCB HTF 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.
- C. If a project is out of compliance with the HTF Standards, the grantee shall bring to the attention of VHCB staff the specific portion of the project which does not comply, stating the reasons for non-compliance. VHCB staff will make a determination as to whether an exception to the HTF Standards shall be granted.
- D. 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

- A. 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.
- B. Project Design Professionals
  1. Projects will be designed by licensed professionals per Section 7 of the 2012 Vermont Fire & Building Code.
  2. 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. (See Section III below.)
  3. 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.
- C. By meeting the various code requirements as a minimum standard, together with the other standards herein or in attendant VHCB policies, each building rehabilitation project is assured to be brought up to an acceptable level of rehabilitation.
- D. Warranties shall be required per the standard construction contracts on all materials, equipment and workmanship.

### III. CODE COMPLIANCE

- A. All work shall comply with all applicable Vermont state and local codes, ordinances, and zoning requirements. Key currently updated Vermont State Codes are located at <http://firesafety.vermont.gov/buildingcode/codes>. Applicable state codes include but are not limited to:
  1. Vermont Fire Building Safety Code, 2012
  2. NFPA 1, Fire Code, 2012
  3. NFPA 101, Life Safety Code, 2012
  4. ICC, International Building Code (IBC), 2012
  5. Vermont Electrical Safety Rules

6. Vermont Plumbing Rules
  7. Vermont Elevator Safety Rules
  8. Vermont Access Rules (ADA)
  9. Vermont Rental Housing Health Code
- B. Please note that the VHCB HTF grantee must demonstrate compliance with all state and local codes through project affiliation with professional design team drawing certifications (e.g. architectural design stamp) and/or other approved methods such as state inspector certification.
  - C. A code review analysis will be produced by the project's design professionals itemizing the applicable codes for each area of discipline.
  - D. The HTF Standards are designed to exceed the Uniform Physical Condition Standards (UPCS) and 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. See Appendix A attached hereto for a list of Inspectable Items and Observable Deficiencies, including descriptions of the type and degree of deficiency for each item that any HTF-assisted project must address, at a minimum.

#### **IV. HEALTH AND SAFETY**

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

#### **V. SCOPE OF WORK DETERMINATION**

- A. In developing scopes of work, grantees and developers will work with VHCB 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. VHCB approval of all scopes of work is required in accordance with VHCB standard practice as outlined in VHCB Policy & Procedures for Project Underwriting and VHCB Standard Loan/Grant Conditions.

#### **VI. EXPECTED USEFUL LIFE / REHABILITATION SCOPE & CAPITAL PLANNING**

- A. In developing scopes of work on housing rehabilitation projects VHCB HTF grantees and developers will consider the remaining expected useful life of all building components with regard to building long-term sustainability and performance. Specifically, each building component with a remaining expected useful life of less than the applicable 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.
- B. Project CNAs are required pursuant to the VHFA, VHCB, VT DHCD Capital Needs (CNA) Guidance <http://www.vhcb.org/pdfs/hsgpolicy/cnaguidelines.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.
- C. Once a scope of work has been developed by the grantee and their development team, the grantee must also develop a Capital Plan in compliance with VHCB policy on Capital Needs Assessments (see link above). 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.
  - Example #1: Kitchen cabinets with a remaining useful life of 8 years may be permitted to be left in place and not included in the rehabilitation scope. However, adequate funding shall be demonstrated in the building capital plan to replace those cabinets in year 8 of the post-rehabilitation capital plan.
  - Example #2: If a building component such as a new roof is installed during the rehabilitation and this roof has an expected useful life of 25 years, it will not show up on the initial CNA as needing

replacement during that 20-year period. However, since VHCB requires updates of CNA's to be performed every 5 years, it will show up on the next 20-year CNA which will be performed in year 5 of the project and cover years 6-25. During these 5-year CNA updates, the project reserve contributions will be reviewed to ensure all future capital expenditures articulated in the CNA are adequately funded through the 30-year affordability period.

- D. Monthly replacement reserves contributions of at least \$50 per unit per month (pum) are required through the 30-year affordability period. If the initial 20-year CNA and capital plan (and/or any subsequent 5-year updates) indicate that replacement costs for the period exceed the amount generated by a \$50 pum contribution, a higher pum contribution will be required.
- E. 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.

## **VII. ENERGY EFFICIENCY**

- A. All VHCB HTF-funded projects shall be subject to the VHCB "Policy on Energy Efficiency and Water Conservation in Multifamily Residential Properties." Contained within this policy are the VHCB and VHFA "Multifamily Energy Design Standards." As outlined in those standards, all projects will either achieve the target energy efficiency objectives of the standard or present VHCB with an operational case for project sustainability pursuant to the financial structure of the project.
- B. 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.

## **VIII. DISASTER MITIGATION**

- A. 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.
- B. Specifically regarding flood hazards, the most relevant potential natural disaster for the State of Vermont:
  - 1. 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.
  - 2. Projects shall meet fluvial erosion prevention requirements per local municipality regulations.

## **IX. BIDDING AND PROJECT MANAGEMENT**

- A. All projects will be bid in accordance with the VHCB procurement policy which applies to all VHCB HTF-funded projects. Grantees and developers will submit a project management plan with their application which will outline how the project will be managed (e.g. General Contractor (GC) bid project, Construction Management (CM) project or other project management plan). Any changes to project management operational structure which substantially varies from the plan provided to VHCB at the time the HTF funding is awarded requires prior notification to VHCB HTF staff.

## **X. PROJECT ARCHITECTURAL REHABILITATION DESIGN STANDARDS**

### **A. BUILDING OCCUPANCY & CONSTRUCTION TYPE**

- 1. Fire resistance rating separation requirements per code
- 2. Shall comply with NFPA 1 and NFPA 101, Chapters 8 & 43

### **B. HISTORIC BUILDINGS**

- 1. Shall comply with NFPA 101, Chapter 43.10.4
- 2. Shall comply with IBC, Chapter 3409

- C. Historic buildings shall be rehabilitated in a manner consistent with the requirements of Section 106 of the National Historic Preservation Act and the Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Buildings. In the absence of a Programmatic Agreement among the Vermont Agency of Commerce & Community Development, the Vermont State Historic Preservation Officer, VHCB, and the

Advisory Council on Historic Preservation for the administration of the HTF Program (the “HTF Programmatic Agreement”), scopes of work shall be reviewed and approved by VHCB’s Historic Preservation Consultant in consultation with the State Historic Preservation Officer. If/when there is an HTF Programmatic Agreement, scopes of work shall be reviewed and approved by VHCB’s Historic Preservation Consultant in accordance with the HTF Programmatic Agreement.

**D. ACCESSIBILITY REQUIREMENTS**

1. Housing that is rehabilitated 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
  - e. Projects shall comply with the 2012 Vermont Access Rules
  - f. Projects shall comply with the Vermont Access Standards for Public Buildings and Parking
3. Projects shall comply with other standards as may apply or be required by funding sources (i.e. USDA Rural Development)
4. Projects, if applicable, shall comply with Section 504 of the Rehabilitation Act of 1973 implemented at 24 CFR Part 8
  - a. For “substantial” rehabilitation (projects with 15 or more total units and the cost of rehabilitation is 75% or more of the replacement cost):
    - i. 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-substantial” rehabilitation (anything less than “substantial”), the project must be made accessible to the greatest extent feasible until 5% of the units are physically accessible, and common spaces should be made accessible as much as possible.
5. Projects, if applicable, shall comply with the Vermont Access Rules
  - a. The 2012 Access Rules Adaptable and VISIBLE Standards for dwellings went into effect on April 1, 2012. These standards include both federal Fair Housing design requirements as well as state “visitability” requirements that were implemented under Act 88. They adopt the 2010 ADAAG standards as standards for all “public buildings,” which include not only apartments, but also buildings containing “covered multifamily dwelling units” as defined in the Access Rules. These standards effectively capture almost all of VHCB’s housing projects, and a good deal of private, multi-family development. Thus, even though buildings may not normally be required to meet the 2010 ADAAG standards under federal law, they may still be required to do so under state law.

**E. 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 components shall be in conformance with Chapter 7 of NFPA 101, 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 IBC 1208 and/or local codes.
  - b. Interior environment shall comply with Chapter 12 of the IBC. Note: Sections of IBC Chapter 12 not specifically adopted by State of Vermont are to be used as a design guideline parameter.
  - c. Kitchens – in general, for apartment buildings – each unit will have a functional and code-compliant kitchen
    - i. SRO's and other special housing types may be an exception
  - d. Baths – in general, for apartment buildings – each unit will have a functional and code compliant bath in accordance with IBC 1210
    - i. SRO's and other special housing types may be an exception
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 in compliance with Vermont's "Universal Recycling Law"
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.

## **XI. REHABILITATION CONSTRUCTION STANDARDS**

### **A. SITE (CSI DIVISION 2)**

1. General:
  - a. Assure that the site is safe, clean and usable, and designed with details, assemblies and materials to provide ongoing durability without undue future maintenance.
  - b. Site design and engineering shall be by a licensed professional civil engineer, or other qualified professional.
  - c. Design and systems shall conform to all applicable codes, rules and regulations:
    - i. Local and municipal zoning
    - ii. 2012 Vermont Fire and Building Code – current adopted edition
    - iii. State Land Use and Development Act 250 Permit as may be required by project scope.
    - iv. NFPA Codes as they may apply
  - d. A Project Review Sheet shall be submitted to the Vermont Agency of Natural Resources (ANR) to determine other permit requirements related to site design and construction:
    - i. Sewer and Septic – Vermont Waste Water System and Potable Water Supply Rules – WW permit
    - ii. Domestic Water - Vermont Waste Water System and Potable Water Supply Rules - WW permit
    - iii. Storm Water Permits relating to erosion control and storm water management and discharge
    - iv. Access to State Highways – VTrans rules and regulations as may be required
    - v. Wetlands – Review with State Water Quality Division
2. Sprinkler water service – Underground water service as required for building sprinkler system shall be in accordance with NFPA 24.
3. Drainage – assure that the grading surrounding the building will slope away from the building and drain properly, without ponding or erosion.
4. Sewer connections to municipal sewage systems and on-site sewage disposal:
  - a. Existing sewer laterals that are to be reused should be evaluated to assure that they are serviceable and have a remaining useful life of 30 years, or are covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.

- b. New systems designed to conform to the State “Wastewater System & Potable Water Supply Rules” (WW permit) regulations.
- 5. Water service:
  - a. Existing municipal water supplies to buildings shall be evaluated to assure that they are serviceable, of adequate capacity and have a remaining useful life of 30 years, or are covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
  - b. Required new systems shall be designed to conform to the State “Wastewater System & Potable Water Supply Rules” (WW permit) regulations, and the American Waterworks Association (AWWA) guidelines.
- 6. Vehicular access to public way – site design shall conform to local zoning and VTrans regulations, as well as be sensible in its layout to maximize vehicular and pedestrian safety.
- 7. On-site Parking – parking shall be adequate for project type, meet local codes, and be designed to drain well, with a durable appropriate surface material. Handicapped parking shall be provided as required. Designers may utilize Institute of Transportation Engineers (ITE) guidelines in the design.
- 8. Pedestrian access and hardscape – In general, paved walkways within the site will be designed to provide sensible pedestrian access from the public way into the site, from parking areas, and provide access to buildings. All walkways should generally conform to applicable codes for width and slopes, and fall protection. Site stairs shall be safe 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.
- 9. Site amenities – site amenities may be provided which enhance the livability of the project including playground areas, seating, benches, patio areas, picnic tables, bike racks, grills, and fencing, etc.
- 10. Mailboxes - Provision will be made for USPS-approved cluster mailbox units if required by the USPS.
- 11. Landscaping – lawns, ground cover, planting beds, perennial plants, shrubs and trees may be provided to enhance the livability, and to provide a positive aesthetic sense.
  - a. Planting choices specified should be low maintenance, non-invasive species, of an appropriate size and scale and located, when adjacent to building structures, with regard to their size at maturity.
- 12. Solid waste collection & storage – if necessary, provision shall be made for the outdoor storage and collection of solid waste and recycling materials in receptacles (dumpsters, wheeled trash cans, totes). Enclosures may be provided and should be accessible as required by code.
- 13. Site lighting with shielded fixtures may be provided to illuminate parking and pedestrian walkways, and will conform to local zoning (and Act 250 if necessary).
  - a. Energy efficient lighting shall conform to the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
- 14. Fuel Storage – On site outdoor placement and storage of fuels per applicable regulations and utility requirements.
- 15. Underground or overhead utilities – as regulated by code and utility rules.

**B. FOUNDATIONS** (CSI DIVISION 3)

- 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. New below-grade structures to conform to Chapter 18 of IBC as appropriate.
- 5. 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.

- c. Dead spaces
  - i. provide concrete rat slabs,
  - ii. where earthen floors are to remain, provide wear layer of peastone (or similar suitable material) over vapor barriers.
- 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. Provide vapor barriers covered with a wear layer of peastone over earthen basement or crawl space floors to remain.
  - c. Ventilation of basements and crawl spaces per IBC, Chapter 1203.

**C. MASONRY COMPONENTS** (CSI DIVISION 4)

- 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. Historic masonry designated to remain shall be restored to sound serviceable condition, and in accordance with Section 106 of National Historic Preservation Act.
  - a. Where masonry is considered historic, repairs will be carried out utilizing the Secretary of the Interior’s “Standards of Rehabilitation” and related NPS Preservation Briefs for “Repointing Mortar Joints on Historic Masonry Buildings”
- 5. Chimneys
  - a. Assure structural integrity, reconstruct, and point as necessary
  - b. If used for fuel heating appliances – provide lining as may be required by code and as prescribed by the heating appliance manufacturer.

**D. STRUCTURE**

- 1. A qualified professional shall examine each building’s load-bearing structure, and assess its existing condition to determine suitability of continued use.
- 2. In general, structure evaluation and design shall be in conformance with IBC, Chapter 16, per the 2012 State Fire & Building Code.
  - a. In most residential rehab projects where there is no change in use, it is not expected that the structure will be brought up to new construction standards.
  - b. Consideration shall be given if there are any proposed changes in use which would impact the historical loading.
- 3. Deficiencies identified shall be addressed and repairs designed and specified as necessary to correct such conditions:
  - a. Repairs shall be made to any deteriorated load-bearing structural elements.
  - b. Reinforce, install supplemental or replace structural members determined not to be adequate for use.

**E. ENCLOSURE - SHELL** (CSI DIVISION 7)

- 1. Roofing
  - a. Existing

- i. Examine existing roofing and flashing systems to determine suitability for continued use. Continued life expectancy of existing roofing should be a minimum of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
    - ii. Repair existing roofing as required.
    - iii. Existing historical slate roofs shall be repaired in accordance with the Secretary of the Interior’s “Standards for Rehabilitation” project requirements if applicable.
  - b. New Roofing
    - i. New roofing shall be installed where existing roofing does not meet requirements for continued use.
    - ii. New roofing system components shall be compatible, and include - the nail base, the underlayment layer, ice & water shield self-adhesive membrane flashings, metal flashings and roofing.
      - Strip existing roofing and dispose of properly.
      - Examine exposed existing substrate for structural soundness
      - Install new roofing system per code and per NCRA trade practices, and manufacturer specifications.
      - Flashings – deteriorated flashings shall be replaced, and the 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, and appropriate building science detailing.
- 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.
      - Replace existing wood siding on historic buildings as necessary in accordance with the Secretary of the Interior’s “Standards for Rehabilitation” project requirements.
    - ii. Masonry
      - Masonry bearing walls and veneers shall be restored as necessary
        - 1. Refer to Section XI C – Masonry
        - 2. Refer also to Section XI F.2.b for insulation requirements
        - 3. All work on historic masonry shall be done in accordance with the Secretary of the Interior’s “Standards for Rehabilitation” project requirements.
    - 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.
    - iii. Repair of historic woodwork and trims shall be in accordance with the Secretary of the Interior’s “Standards for Rehabilitation” project requirements.
  - b. New wood trim shall be installed in a workmanlike manner. Reference may be made to Architectural Woodwork Institute (AWI) standards.
  - c. Other trim materials (PVC, cementitious, etc.) 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. (See Section XI N.1.b)
  - 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
  - i. Existing porches, decks, steps and railings proposed to remain shall be examined and repaired as necessary. Repair and reconstruction shall be carried out to assure that they will have a continued useful life of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
  - ii. Inspect structure for soundness and reconstruct any deteriorated members as required.
  - iii. Install new support piers as may be required.
  - iv. Patch existing decking with matching materials, or install new durable decking.
- b. Railings
  - i. shall be sound and adequately fastened to meet code requirements for structural loading. Repair or replace in-kind as appropriate.
  - ii. Shall meet code requirements for height of protective guards, or have supplemental guards installed.
- c. Steps shall be safe and sound and meet applicable codes, with railings as necessary.
- d. Historic porches designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
- e. All porch elements shall be able to withstand the weather elements to prevent premature deterioration.

**F. ENCLOSURE – THERMAL (CSI DIVISION 7)**

1. Energy Efficiency - In general, most buildings will be rehabbed with a goal of increasing the thermal shell efficiency.
  - a. All VHCB HTF funded projects shall be subject to the VHCB "Policy on Energy Efficiency and Water Conservation in Multifamily Residential Properties". Contained within that policy are the VHCB and VHFA "Multifamily Energy Design Standards." As outlined in those standards all projects will either achieve the target energy efficiency objectives of the standards or present VHCB with an operational case for project sustainability pursuant to the financial structure of the project.
  - b. 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
  - a. Insulation levels shall conform to the VHCB "Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties" dated March 15, 2012.
  - b. Masonry walls shall be insulated utilizing current building science detailing to ensure ongoing integrity of masonry systems.
3. Air sealing – comply with the Vermont Multifamily Air Sealing Protocol (MASP) per the VHCB "Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties" dated March 15, 2012.
  - a. Attention must be paid to the air barrier of each building and should be well thought out, detailed, and carefully executed.
  - b. Blower door testing shall be performed to verify compliance and successful execution.
4. 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.

5. Ventilation
  - a. Venting of crawl spaces, attics and sloped ceilings shall be per code.
  - b. See Section XI E.1.c for roof assembly ventilation.

**G. ACOUSTICAL TREATMENTS –**

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

**H. DOORS (CSI DIVISION 8)**

1. General
  - a. Doors to meet code requirements of NFPA 101, Chapters 7.2, 8.3, 30.3.6.2 & 30.2.2.2
  - b. Meet egress requirements for dimensions, swing and clearances, and be accessibility compliant as required.
  - c. Be sound and secure.
  - d. New doors shall be installed per manufacturers' recommendations and standard trade practice standards.
  - e. Flash properly, and have shim spaces insulated.
  - f. Existing doors to remain should be examined and determined to be suitable for reuse with a remaining life after restoration of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period.
    - i. Restore as required to provide useful life.
    - ii. Shall be tested and modified as necessary to operate properly.
    - iii. Install new weather stripping and sweeps to provide seal against weather elements and air infiltration.
    - iv. Historic doors designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
2. 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 and NFPA 101, Chapters 7.2, 8.3, 30.3.6.2 & 30.2.2.2.

**I. WINDOWS (CSI DIVISION 8)**

1. Windows shall be of legal egress size when required by code
  - a. In townhouse apartments, existing windows which are non-conforming egress size shall be reviewed and meet the Vermont Fire & Building Code amendment to NFPA 101, Chapter 24.2.2.3.3
2. Existing windows:
  - a. Existing windows to remain should be examined and determined to be suitable for reuse with a reasonable remaining life after restoration of 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.
  - b. Capable of providing adequate seal against air infiltration, weather elements, and be determined to be appropriately energy efficient in keeping with the overall energy efficiency strategy of the project.
  - c. Install new weather stripping to provide seal against weather elements and air infiltration.
  - d. Air seal shim spaces and window weight pockets if possible.
  - e. Restore and modify as required to provide useful life.
  - f. Shall be tested and modified as necessary to operate smoothly and properly per code.
  - g. Historic windows designated to remain shall be restored to sound serviceable condition, and in accordance with the Secretary of the Interior's "Standards for Rehabilitation" project requirements.
  - h. Hardware shall be intact and operational, or be replaced with new hardware as required
3. New Windows:
  - a. Where existing windows do not meet the standards for egress, condition, and/or energy efficiency deemed appropriate to the project, they shall be replaced by new windows.

- b. New windows shall be code compliant, and conform with the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012. Developers are encouraged to consider upgrading to Tier II level by providing R-5 windows.
- c. Additionally, new window units should be tested assemblies meeting ASTM standards for water penetration & air leakage.
- d. All windows shall be installed per manufacturer’s installation guidelines and specifications, and shall incorporate appropriate detail, flashings, joint sealers, and air sealing techniques.

**J. INTERIOR FINISHES** (CSI DIVISION 9)

- 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. Per chapter 10 of NFPA 101 (Reference also Chapter 8 of the IBC).
- 3. 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.
  - b. Where existing finishes are proposed to remain as part of a fire rated assembly, the State DPS shall assist in making a determination as to the suitability. Refer to codes as they pertain to archaic materials, and relevant NPS Preservation Briefs.
- 4. 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.
- 5. 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.
- 6. 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 (See Section XI N.1.b).

**K. SPECIALTIES** (CSI DIVISION 10)

- 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:
  - a. Including building address 911 #'s, apartments’ identification, building directory, exits, stairways, common and utility spaces, etc. shall be in conformance with NFPA 101 Life Safety Code, and be accessibility compliant and 911 approved.
- 4. Exit signage will be provided as required by 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. Locate as directed by authorities.
- 6. Shelving – provide durable, cleanable shelving for pantries, linen closets, clothes closets and other storage as appropriate, securely fastened in place.

**L. EQUIPMENT** (CSI DIVISION 11)

- 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. Equipment shall conform to the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
4. 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.
5. 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.
  - a. Heat pump dryers are encouraged where appropriate and readily available.
  - b. Where a project is served by natural gas, consideration of the use of natural gas dryers is encouraged. In projects not served by natural gas, propane fired dryers should be considered for cost of operation reasons where feasible and appropriate.
6. Solid waste handling – Provide trash and recycling receptacles as appropriate to enable the tenants and property management staff to handle and store solid waste in compliance with Vermont’s “Universal Recycling Law.”
7. Playground equipment – Provide safe, code-approved new playground equipment if a playground is appropriate, pursuant to VHCB’s Policy for Funding Affordable Housing Projects.

**M. FURNISHINGS - CASEWORK** (CSI DIVISION 12)

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, meeting ANSI/KCMA A161.1-2012 “Performance & Construction Standards for Kitchen Cabinetry and Bath Vanities” standards. Other industry standards for cabinetry may be used as guidelines, such as the Kitchen Cabinet Manufacturer’s Association (KCMA) “Severe Use Specification – 2014,” the Architectural Woodwork Institute’s (AWI) Woodwork Standards and Cabinet Fabrication Handbook.
    - ii. New counters shall be provided with a cleanable sanitary surface material impervious to water such as high pressure laminate (HPL).
      - Shop fabricated as one piece assembly where possible. Seal field joints.
      - Installed level and securely fastened to cabinetry
2. Bath cabinetry and counters – vanity lavatory tops, when used, should be one piece integral bowl with integral backsplash

**N. SPECIAL CONSTRUCTION** (CSI DIVISION 13)

1. Hazardous materials and remediation – see “VHCB Policy Position on Lead-Based Paint and Other Toxic and Hazardous Materials” dated May 2001:
  - a. Asbestos – project will be assessed for the existence of asbestos-containing building materials by qualified professionals:
    - i. National Emission Standards for Hazardous Air Pollutants (NESHAP) apply.
    - ii. Removal of asbestos shall be carried out per Federal EPA and State regulations and rules.
  - b. Lead - Health and Safety and Lead Safe Housing:

- i. All scopes of work performed pursuant to this rehabilitation standard shall support the maintenance of project compliance with the Vermont Rental Housing Health Code. Current code is available at [http://www.healthvermont.gov/regs/Rental\\_Housing\\_Code.pdf](http://www.healthvermont.gov/regs/Rental_Housing_Code.pdf)
- ii. Lead-Based Paint
  - 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:

Federal Regulations:

- 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. Assistance from VHCB's Lead Hazard Reduction Program insures all requirements of this Rule are met. More information is available at: [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes/enforcement/lshr](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/enforcement/lshr)
- 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>
- 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](http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_12347.pdf)
- 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=10641](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10641)

Vermont Regulations Title 18, Chapter 38:

- Vermont law requires all work that disturbs paint in target housing and child care facilities to be completed using lead safe work practices. Rehabilitation completed according to the federal regulations described above will generally fulfill this requirement. Vermont does ban certain unsafe practices that are allowed under some of the federal regulations, including power sanding and grinding, dry scraping, and use of certain kinds of paint strippers. More information about Vermont's law and other regulations is available at: <http://www.leadSAFEvermont.org/>
- It is important to note that Section 1760 of the Vermont law prohibits unsafe practices on any lead paint surface, and “all paint in target housing and child care facilities is presumed to be lead-based unless a lead inspector or risk assessor has determined that it is not lead-based.” <http://legislature.vermont.gov/statutes/section/18/038/01760>
- Section 1759 of the Vermont law also requires owners of target rental housing to complete certain Essential Maintenance Practices (EMPs) to reduce the risk of resident children ingesting lead. These practices include regular inspections for deteriorated paint, prompt and safe repairs,

and submission of annual compliance statements online at <https://secure.vermont.gov/VDH/emp/>. More information is available at the web site listed above or at <http://legislature.vermont.gov/statutes/section/18/038/01759>.

- Any questions regarding compliance with lead paint regulations should be directed to the VHCB Lead Hazard Reduction Program at (802) 828-5064 or the Vermont Department of Health Asbestos and Lead Regulatory Program at (800) 439-8550, (802) 863-7220, or <http://healthvermont.gov/enviro/lead/index.aspx>.

**O. CONVEYANCE SYSTEMS** (CSI DIVISION 14)

1. Elevators may be installed when appropriate and possible, when such elevator is part of the project's program goals, or as required by code, as follows:
  - a. Installed per code NFPA 101, Chapter 9.4
  - b. ASME 17.1 Safety Code for Elevators - 2013
  - c. 2014 Vermont Elevator Safety Rules
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.

**P. MECHANICAL** (CSI DIVISION 15)

1. General:
  - a. All mechanical systems shall be designed by a mechanical engineer or other qualified professional.
  - b. Energy efficiency:
    - i. All VHCB HTF funded projects shall conform to the VHCB "Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties" dated March 15, 2012.
    - ii. As outlined in the HTF Standards, all projects will either achieve the target energy efficiency objectives of the standard or present VHCB with an operational case for project sustainability pursuant to the financial structure of the project.
    - iii. 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:
    - i. Vermont 2012 Fire & Building Code & NFPA 101 Life Safety Code, 2012 Edition
    - ii. International Plumbing Code – 2012 & 2012 Vermont Plumbing Safety Rules as adopted as part of the 2012 Vermont Fire & Building Code
    - iii. Vermont Energy Codes as they may apply:
      - 2015 Vermont Residential Building Energy Standards (RBES) for buildings of three stories or less (and/or)
      - Vermont Commercial Building Energy Standards (CBES) for buildings of 4 stories or more, and some mixed-use buildings.
    - iv. Plumbing fixtures will be accessibility compliant as required
    - v. 2012 Fire & Building Code, Section 6 as pertains to boilers
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 by NFPA 101 and NFPA 1, and approved by the Vermont Department of Public Safety:
    - i. System design to conform to applicable NFPA standard 13 or 13R
    - ii. System calculations and design shall be done by a person holding a NICET Level III certification or a Vermont Licensed Fire Protection Engineer.
    - iii. System installed by State approved persons holding appropriate TQP certificates.
    - iv. Underground water services for sprinkler system shall meet NFPA 24
    - v. Provide fire pumps, standpipes, and fire department connection as required per NFPA 13, 14 & 25.
  - b. Where possible, piping for the sprinkler system shall be concealed.

3. Plumbing
  - a. Where existing components of a system are to be reused, they will be examined and determined to be in good condition, code compliant and have a remaining useful life of a minimum of 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.
  - b. Use water-saving shower heads and faucet aerators as required by the VHCB “Policy on Energy Efficiency and Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
  - c. All fixtures, piping fittings and equipment shall be lead-free in accordance with the Vermont Plumbing Rules.
  - d. Kitchen fixtures – When existing kitchen fixtures are not reused in accordance with a. above, new sinks and faucets, and associated plumbing shall be installed in each apartment.
  - e. Bath fixtures – When existing bath fixtures are not reused in accordance with a. above, new water saving toilets, tubs and tub surrounds, lavatory sinks, and faucets shall be installed in each apartment.
    - i. Three and four-bedroom apartments are encouraged to be designed to include 1½ baths minimum where adequate space is available.
  - f. Provision for laundry rooms or laundry hook-ups may be made per project’s program requirements.
  - g. Provision for other utility plumbing for janitor sinks, floor drains, outdoor faucets, drains for dehumidification systems, etc., may be made as desired or required.
4. Heating
  - a. System design:
    - i. Designed and constructed to conform with the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
    - ii. 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.
  - b. Temperature control - The temperature in each apartment shall be individually thermostatically controlled.
  - c. Provide adequate heat in common spaces.
  - d. Install pipe insulation with minimum 1.5” wall thickness
  - e. Minimum equipment efficiencies per Efficiency Vermont’s Energy Code Plus guidelines
  - f. Motors and pumps – high efficiency Brushless Permanent Magnet Pumps (BLPM) with variable frequency drives (VFD) per VMMRP
  - g. Control wiring and control strategies per VMMRP with outdoor temperature reset.
  - h. Finned Tube Radiation – where used - high output heavy gauge enclosure baseboard finned tube radiation is recommended to provide a more durable product with a longer expected useful life. Replace existing as appropriate.
5. Ventilation
  - a. Code-compliant indoor air quality will be addressed by the installation of either exhaust only or balanced (heat recovery) ventilation systems as required by:
    - i. Fire protection of system ducts per NFPA 101, Chapter 9.2
    - ii. ASHRAE 62.2
    - iii. REBS or CBES
    - iv. VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
  - b. Balanced mechanical ventilation systems are encouraged.
  - c. Ventilation controls shall be per applicable codes
6. Domestic Hot Water:
  - a. System shall be designed as required for Efficiency Vermont certification level
  - b. Install pipe insulation per code.

**Q. ELECTRICAL** (CSI DIVISION 16)

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. Energy efficiency:
  - a. Designed and constructed to conform with the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
4. Design shall be comply with all the applicable codes:
  - a. Vermont State Fire & Building Code, 2012
  - b. NFPA 101, Life Safety Code
  - c. NFPA 70, National Electrical Code, 2011 Edition
  - d. NFPA 72, National Fire Alarm and Signaling Code
  - e. NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection
5. In general, the electrical system should be new throughout a building:
  - a. Where existing service entrances, disconnects, meters, distribution wiring, panels, and devices are proposed to remain, they will be examined and determined to be in good condition, code compliant and have a remaining useful life of a minimum of 30 years, or covered by the 20-year capital plan and/or subsequent 5-year updates during the 30-year affordability period. The designer, in concert with the State electrical inspector, shall examine the system and equipment. Existing components of the electrical system may be reused as appropriate. Substandard or critical non-code compliant components shall be replaced.
6. Utility connections shall be installed per the rules and regulations of the electrical utility.
7. Electrical service and metering:
  - a. The service entrance size shall be calculated to handle the proposed electrical loads.
  - b. Metering and disconnects shall be per code and mounted at approved locations.
8. Elevator wiring shall conform to the ANSI 17.1 as modified by the Vermont Elevator Safety Rules.
9. Electrical distribution system:
  - a. Lighting and receptacle circuits shall be designed per code.
  - b. Locations and layout of devices and lighting to be logical and accessibility compliant where required.
  - c. Provision shall be made for the wiring of dedicated equipment circuits and connections for heating, ventilation equipment/exhaust fans, pumps, appliances, etc.
10. Artificial Lighting shall be provided using IBC 1205 as a minimum guideline.
  - a. All lighting shall be in accordance with the 2015 Vermont Residential or Commercial Energy Standards (RBES or CBES) and meet the minimum program requirements of Efficiency Vermont’s Multifamily Checklist as required by the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012. Lighting controls and control strategies shall also be in accordance with RBES or CBES, and meet the minimum program requirements of Efficiency Vermont’s Multifamily Checklist as required by the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
  - b. Developers are encouraged to upgrade to Energy Star® Category.
11. Site lighting with shielded fixtures may be provided to illuminate parking and pedestrian walkways, and will conform to local zoning (and Act 250 if necessary).
  - a. Energy efficient lighting shall meet the minimum program requirements of Efficiency Vermont’s Multifamily Checklist as required by the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012 and the minimum program requirements of Efficiency Vermont’s Multifamily Checklist as required by the VHCB “Policy on Energy Efficiency & Water Conservation in Multi-family Residential Properties” dated March 15, 2012.
12. Emergency and exit lighting/illuminated signage shall be per the NFPA 101, Life Safety Code.
13. Fire detection and alarms:
  - a. Shall be installed as required by code: NFPA 101, Chapters 9.6, 30.3.4 and/or 31.3.4, and comply with NFPA 72, and NFPA 1.
  - b. Smoke detectors shall be installed per NFPA 30.3.4.5 and 9.6.2.10.

- c. CO detectors shall be installed per 2012 Vermont State Fire and Building Code and NFPA 101, Chapter 30.3.4.6 and NFPA 720.
  - d. Where required – system annunciation shall be in accordance with NFPA 1.
14. Communication low-voltage wiring – provisions for TV, telephone, internet data, security, and intercoms should be considered and installed as appropriate to the project's use and livability.
  15. PV Solar – an optional solar-powered photovoltaic panel system may be installed in accordance with the National Electrical code, State energy code, and the regulations of the governing utility.

**VHCB HTF Rehab Standards Appendix A: Uniform Physical Condition Standards for Multifamily Housing Rehabilitation - August 2016**

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

<b>Requirements for Site</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	<b>Type and Degree of Deficiency that must be addressed</b>
Fencing and Gates	Damaged/Falling/Leaning	Fence or gate is missing or damaged to the point it does not function as it should
	Holes	Hole in fence or gate is larger than 6 inches by 6 inches
	Missing Sections	An exterior fence, security fence or gate is missing a section which could threaten safety or security
Grounds	Erosion/Rutting Areas	Runoff has extensively displaced soils which has caused visible damage or potential failure to adjoining structures or threatens the safety of pedestrians or makes the grounds unusable
	Overgrown/Penetrating Vegetation	Vegetation has visibly damaged a component, area or system of the property or has made them unusable or unpassable
	Ponding/Site Drainage	There is an accumulation of more than 5 inches deep and/or a large section of the grounds-more than 20%-is unusable for its intended purpose due to poor drainage or ponding
Health & Safety	Air Quality - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	<b>Air Quality - Propane/Natural Gas/Methane Gas Detected</b>	<b>Strong propane, natural gas or methane odors that could pose a risk of explosion/fire and/or pose a health risk if inhaled</b>
	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	<b>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</b>
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	<b>Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</b>
	Flammable Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Outdoors	Too much garbage has gathered-more than the planned storage capacity, or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
Hazards - Sharp Edges		Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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
Signs Damaged		The project sign is not legible or readable because of deterioration or damage
Parking Lots/Driveways/Roads	Cracks	Cracks that are large enough to affect traffic ability over more than 5% of the property's parking lots/driveways/roads or pose a safety hazard
	Ponding	3 inches or more of water has accumulated making 5% or more of a parking lot/driveway unusable or unsafe
	Potholes/Loose Material	Potholes or loose material that have made a parking lot/driveway unusable/unpassable for vehicles and/or pedestrians or could cause tripping or falling
	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	More than 20% of the equipment is broken or does not operate as it should or any item that poses a safety risk
	Deteriorated Play Area Surface	More than 20% of the play surface area shows deterioration or the play surface area could cause tripping or falling and thus poses a safety risk
Refuse Disposal	Broken/Damaged Enclosure-Inadequate Outside Storage Space	A single wall or gate of the enclosure has collapsed or is leaning and in danger of falling or trash cannot be stored in the designated area because it is too small to store refuse until disposal
Retaining Walls	Damaged/Falling/Leaning	A retaining wall is damaged and does not function as it should or is a safety risk
Storm Drainage	Damaged/Obstructed	The system is partially or fully blocked by a large quantity of debris, causing backup into adjacent areas or runoffs into areas where runoff is not intended
Walkways/Steps	Broken/Missing Hand Railing	The hand rail is missing, damaged, loose or otherwise unusable
	Cracks/Settlement/Heaving	Cracks, hinging/tilting or missing sections that affect traffic ability over more than 5% of the property's walkways/steps or any defect that creates a tripping or falling hazard
	Spalling/Exposed rebar	More than 5% of walkways have large areas of spalling--larger than 4 inches by 4 inches--that affects traffic ability
<b>Requirements for Building Exterior</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	<b>Type and Degree of Deficiency that must be addressed</b>
Doors	Damaged Frames/Threshold/Lintels/Trim	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
	Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
	Damaged Surface (Holes/Paint/Rusting/Glass)	Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass
	Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Deteriorated/Missing Caulking/Seals	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Missing Door	Any exterior door that is missing
Fire Escapes	<b>Blocked Egress/Ladders</b>	<b>Stored items or other barriers restrict or block people from exiting</b>
	Visibly Missing Components	Any of the functional components that affect the function of the fire escape--one section of a ladder or railing, for example--are missing
Foundations	Cracks/Gaps	Large cracks in foundation more than 3/8 inches wide by 3/8 inches deep by 6 inches long that present a possible sign of a serious structural problem, or opportunity for water penetration or sections of wall or floor that are broken apart
	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	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	<b>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</b>
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	<b>Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</b>
	<b>Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable</b>	<b>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</b>
	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 materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Outdoors	Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
Hazards - Sharp Edges		Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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
Roofs		Damaged Soffits/Fascia
	Damaged Vents	Vents are missing or so visibly damaged that further roof damage is possible
	Damaged/Clogged Drains	The drain is damaged or partially clogged with debris or the drain no longer functions
	Damaged/Torn Membrane/Missing Ballast	Ballast has shifted and no longer functions as it should or there is damage to the roof membrane that 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 missing or damaged enough to create a risk of water penetration
Walls	Ponding	Evidence of standing water on roof, causing potential or visible damage to roof surface or underlying materials
	Cracks/Gaps	Any large crack or gap that is more than 3/8 inches wide or deep and 6 inches long that presents a possible sign of serious structural problem or opportunity for water penetration
	Damaged Chimneys	Part or all of the chimney has visibly separated from the adjacent wall or there are cracked or missing pieces large enough to present a sign of chimney failure or there is a risk of falling pieces that could create a safety hazard

	Missing/Damaged Caulking/Mortar	Any exterior wall caulking or mortar deterioration that presents a risk of water penetration or risk of structural damage
	Missing Pieces/Holes/Spalling	Any exterior wall deterioration or holes of any size that present a risk of water penetration or risk of structural damage
	Stained/Peeling/Needs Paint	More than 20% of the exterior paint is peeling or paint is missing and siding surface is exposed thereby exposing siding to water penetration and deterioration
Windows	Broken/Missing/Cracked 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
	Damaged Sills/Frames/Lintels/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	Missing screens or screens with holes greater than 1 inch by 1 inch or tears greater than 2 inches in length
	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
	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 security bars that do not function properly and, therefore, pose safety risks
<b>Requirements for Building Systems</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	
Domestic Water	Leaking Central Water Supply	Leaking water from water supply line is observed
	Missing Pressure Relief Valve	There is no pressure relief valve or pressure relief valve does not drain down to the floor
	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
Electrical System	Water Supply Inoperable	There is no running water in any area of the building where there should be
	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	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures, or any evidence of water leaks in the enclosure or hardware
	Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	Missing Breakers/Fuses	Any open and/or exposed breaker port
	Missing Outlet Covers	A cover is missing, which 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	Any sprinkler head is missing, visibly disabled, painted over, blocked, or capped
	Missing/Damaged/Expired Extinguishers	There is 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	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
	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 Blocked/Unusable	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 Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Indoors	Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
Hazards - Other	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping Hazards	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects--including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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 causes improper or dangerous venting of gases
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable	The roof exhaust fan unit does not function
Sanitary System	Broken/Leaking/Clogged Pipes or Drains	Evidence of active leaks in or around the system components or evidence of standing water, puddles or ponding--a sign of leaks or clogged drains
	Missing Drain/Cleanout/Manhole Covers	A protective cover is missing
<b>Requirements for Common Areas</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	
Basement/Garage/Carport	Baluster/Side Railings - Damaged	Any damaged or 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 as it should
Halls/Corridors/Stairs	Ceiling - Holes/Missing Tiles/Panels/Cracks	Any 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 paint or is missing paint
Laundry Room	Ceiling - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew--such as a darkened area--over a ceiling area greater than 1 foot square
Lobby	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
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	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
Patio/Porch/Balcony	Doors - Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
Restrooms	Doors - Damaged Surface (Holes/Paint/Rust/Glass)	Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass
Storage	Doors - Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Doors - Deteriorated/Missing Seals (Entry Only)	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Doors - Missing Door	Any door that is missing that is required for the functional use of the space
	Dryer Vent - Missing/Damaged/Inoperable	The dryer vent is missing or it is not functioning because it is blocked. Dryer exhaust is not effectively vented to the outside
	Electrical - Blocked Access to Electrical Panel	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Electrical - Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Electrical - Evidence of Leaks/Corrosion	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware
	Electrical - Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	Electrical - Missing Breakers	Any open and/or exposed breaker port
	Electrical - Missing Covers	A cover is missing, which results in exposed visible electrical connections

	Floors - Bulging/Buckling	Any flooring that is bulging, buckling or sagging or a problem with alignment between flooring types
	Floors - Floor Covering Damaged	More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas or exposed seams.
	Floors - Missing Floor/Tiles	More than 5% of the flooring or tile flooring is missing
	Floors - Peeling/Needs Paint	Any painted flooring that has peeling or missing paint on more than 10% of the surface
	Floors - Rot/Deteriorated Subfloor	Any rotted or deteriorated subflooring greater than 6 inches by 6 inches
	Floors - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew--such as a darkened area--covering a flooring area greater than 1 foot square
	GFI - Inoperable	The GFI does not function
	Graffiti	Any graffiti on any exposed surface greater than 6 inches by 6 inches
	HVAC - Convection/Radiant Heat System Covers Missing/Damaged	Cover is missing or substantially damaged, allowing contact with heating/surface elements or associated fans
	HVAC - General Rust/Corrosion	Significant formations of metal oxides, flaking, or discoloration--or a pit or crevice
	HVAC - Inoperable	HVAC does not function. It does not provide the heating and cooling it should. The system does not respond when the controls are engaged
	<b>HVAC - Misaligned Chimney/Ventilation System</b>	Any misalignment that may cause improper or dangerous venting of gases
	HVAC - Noisy/Vibrating/Leaking	HVAC system shows signs of abnormal vibrations, other noise, or leaks when engaged
	Lavatory Sink - Damaged/Missing	Sink has extensive discoloration or cracks in over 50% of the basin or the the sink or associated hardware have failed or are missing and the sink can't be used
	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
	<b>Outlets/Switches/Cover Plates - Missing/Broken</b>	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 or is damaged in any 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
	<b>Smoke Detector - Missing/Inoperable</b>	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, loose 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 Compound	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
	<b>Windows - Security Bars Prevent Egress</b>	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
	<b>Air Quality - Propane/Natural Gas/Methane Gas Detected</b>	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
	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion
	<b>Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable</b>	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	Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Garbage and Debris - Outdoors	Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects--including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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	Any 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
	<b>Requirements for Unit</b>	
	<b>Inspectable Item</b>	<b>Observable Deficiency</b>
Bathroom	Bathroom Cabinets - Damaged/Missing	Damaged or missing shelves, vanity tops, drawers, or doors that are not functioning as they should for storage or their intended purpose
	Lavatory 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
	Plumbing - Clogged Drains, Faucets	Drain or faucet is substantially or completely clogged or has suffered extensive deterioration
	Plumbing - Leaking Faucet/Pipes	A steady leak that is adversely affecting the surrounding area
	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
	Ventilation/Exhaust System - Absent/Inoperable	exhaust fan is not functioning or window designed for ventilation does not open
	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
Call-for-Aid (if applicable)	Inoperable	The system does not function as it should
Ceiling	Bulging/Buckling/Leaking	Bulging, buckling or sagging ceiling or problem with alignment
	Holes/Missing Tiles/Panels/Cracks	Any holes in ceiling, missing tiles or large cracks wider than 1/4 of an inch and greater than 6 inches long

	Peeling/Needs Paint	More than 10% of ceiling has peeling paint or is missing paint
	Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew--such as a darkened area--over a ceiling area greater than 1 foot square
Doors	Damaged Frames/Threshold/Lintels/Trim	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
	Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
	Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Damaged Surface - Holes/Paint/Rusting/Glass/Rotting	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
	Deteriorated/Missing Seals (Entry Only)	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Missing Door	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
Electrical System	Blocked Access to Electrical Panel	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Evidence of Leaks/Corrosion	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware
	Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	GFI - Inoperable	The GFI does not function
	Missing Breakers/Fuses	Any open and/or exposed breaker port
	Missing Covers	A cover is missing, which results in exposed visible electrical connections
Floors	Bulging/Buckling	Any flooring that is bulging, buckling or sagging or a problem with alignment between flooring types
	Floor Covering Damage	More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas or exposed seams.
	Missing Flooring Tiles	Any flooring or tile flooring that is missing
	Peeling/Needs Paint	Any painted flooring that has peeling or missing paint on more than 10% of the surface
	Rot/Deteriorated Subfloor	Any rotted or deteriorated subflooring greater than 6 inches by 6 inches
	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
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 - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	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
	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 Blocked/Unusable	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 Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Indoors	Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Garbage and Debris - Outdoors	Too much garbage has gathered--more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects--including roaches and ants--throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
		Infestation - Rats/Mice/Vermin
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	There is evidence of active water leaks from hot water heater or related components
	Pressure Relief Valve Missing	There is 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	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	Any damaged or missing balusters or side rails that limit the safe use of an area
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
	Broken/Missing Hand Railing	The hand rail is missing, damaged, loose or otherwise unusable
Walls	Bulging/Buckling	Bulging, buckling or sagging walls or a lack of horizontal alignment
	Damaged	Any 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
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
	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	<i>More than 10% of interior window paint is peeling or missing</i>
	Security Bars Prevent Egress	<i>The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks</i>

**VHCB HTF Rehab Standards Appendix A: Uniform Physical Condition Standards for Multifamily Housing Rehabilitation - August 2016**

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

<b>Requirements for Site</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	<b>Type and Degree of Deficiency that must be addressed</b>
Fencing and Gates	Damaged/Falling/Leaning	Fence or gate is missing or damaged to the point it does not function as it should
	Holes	Hole in fence or gate is larger than 6 inches by 6 inches
	Missing Sections	An exterior fence, security fence or gate is missing a section which could threaten safety or security
Grounds	Erosion/Rutting Areas	Runoff has extensively displaced soils which has caused visible damage or potential failure to adjoining structures or threatens the safety of pedestrians or makes the grounds unusable
	Overgrown/Penetrating Vegetation	Vegetation has visibly damaged a component, area or system of the property or has made them unusable or unpassable
Health & Safety	Ponding/Site Drainage	There is an accumulation of more than 5 inches deep and/or a large section of the grounds-more than 20%-is unusable for it's intended purpose due to poor drainage or ponding
	Air Quality - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	<b>Air Quality - Propane/Natural Gas/Methane Gas Detected</b>	<b>Strong propane, natural gas or methane odors that could pose a risk of explosion/ fire and/or pose a health risk if inhaled</b>
	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	<b>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</b>
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	<b>Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</b>
	Flammable Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Outdoors	Too much garbage has gathered-more than the planned storage capacity, or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
Infestation - Insects		Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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 cannot be locked or is missing
	Signs Damaged	The project sign is not legible or readable because of deterioration or damage
Parking Lots/Driveways/Roads	Cracks	Cracks that are large enough to affect traffic ability over more than 5% of the property's parking lots/driveways/roads or pose a safety hazard
	Ponding	3 inches or more of water has accumulated making 5% or more of a parking lot/driveway unusable or unsafe
	Potholes/Loose Material	Potholes or loose material that have made a parking lot/driveway unusable/unpassable for vehicles and/or pedestrians or could cause tripping or falling
	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	More than 20% of the equipment is broken or does not operate as it should or any item that poses a safety risk
	Deteriorated Play Area Surface	More than 20% of the play surface area shows deterioration or the play surface area could cause tripping or falling and thus poses a safety risk
Refuse Disposal	Broken/Damaged Enclosure-Inadequate Outside Storage Space	A single wall or gate of the enclosure has collapsed or is leaning and in danger of falling or trash cannot be stored in the designated area because it is too small to store refuse until disposal
Retaining Walls	Damaged/Falling/Leaning	A retaining wall is damaged and does not function as it should or is a safety risk
Storm Drainage	Damaged/Obstructed	The system is partially or fully blocked by a large quantity of debris , causing backup into adjacent areas or runoffs into areas where runoff is not intended
Walkways/Steps	Broken/Missing Hand Railing	The hand rail is missing, damaged, loose or otherwise unusable
	Cracks/Settlement/Heaving	Cracks, hinging/tilting or missing sections that affect traffic ability over more than 5% of the property's walkways/steps or any defect that creates a tripping or falling hazard
	Spalling/Exposed rebar	More than 5% of walkways have large areas of spalling--larger than 4 inches by 4 inches--that affects traffic ability
<b>Requirements for Building Exterior</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	
Doors	Damaged Frames/Threshold/Lintels/Trim	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
	Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
	Damaged Surface (Holes/Paint/Rusting/Glass)	Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass
	Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Deteriorated/Missing Caulking/Seals	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Missing Door	Any exterior door that is missing
Fire Escapes	<b>Blocked Egress/Ladders</b>	<b>Stored items or other barriers restrict or block people from exiting</b>
	Visibly Missing Components	Any of the functional components that affect the function of the fire escape--one section of a ladder or railing, for example--are missing
Foundations	Cracks/Gaps	Large cracks in foundation more than 3/8 inches wide by 3/8 inches deep by 6 inches long that present a possible sign of a serious structural problem, or opportunity for water penetration or sections of wall or floor that are broken apart
	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	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	<b>Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)</b>
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	<b>Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could pose a risk of fire, electrocution or explosion</b>
	<b>Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable</b>	<b>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</b>
	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 materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Outdoors	Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
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	10% or more of the lighting fixtures and bulbs surveyed are broken or missing
Roofs	Damaged Soffits/Fascia	Soffits or fascia that should be there are missing or so damaged that water penetration is visibly possible
	Damaged Vents	Vents are missing or so visibly damaged that further roof damage is possible
	Damaged/Clogged Drains	The drain is damaged or partially clogged with debris or the drain no longer functions
	Damaged/Torn Membrane/Missing Ballast	Ballast has shifted and no longer functions as it should or there is damage to the roof membrane that 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 missing or damaged enough to create a 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	Any large crack or gap that is more than 3/8 inches wide or deep and 6 inches long that presents a possible sign of serious structural problem or opportunity for water penetration
	Damaged Chimneys	Part or all of the chimney has visibly separated from the adjacent wall or there are cracked or missing pieces large enough to present a sign of chimney failure or there is a risk of falling pieces that could create a safety hazard
	Missing/Damaged Caulking/Mortar	Any exterior wall caulking or mortar deterioration that presents a risk of water penetration or risk of structural damage
	Missing Pieces/Holes/Spalling	Any exterior wall deterioration or holes of any size that present a risk of water penetration or risk of structural damage

	Stained/Peeling/Needs Paint	More than 20% of the exterior paint is peeling or paint is missing and siding surface is exposed thereby exposing siding to water penetration and deterioration
Windows	Broken/Missing/Cracked 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
	Damaged Sills/Frames/Lintels/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	Missing screens or screens with holes greater than 1 inch by 1 inch or tears greater than 2 inches in length
	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
	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
	<b>Security Bars Prevent Egress</b>	The ability to exit through egress window is limited by security bars that do not function properly and, therefore, pose safety risks
<b>Requirements for Building Systems</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	
Domestic Water	Leaking Central Water Supply	Leaking water from water supply line is observed
	Missing Pressure Relief Valve	There is no pressure relief valve or pressure relief valve does not drain down to the floor
	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 where there should be
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	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures, or any evidence of water leaks in the enclosure or hardware
	Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	Missing Breakers/Fuses	Any open and/or exposed breaker port
	<b>Missing Outlet Covers</b>	A cover is missing, which 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	Any sprinkler head is missing, visibly disabled, painted over, blocked, or capped
	<b>Missing/Damaged/Expired Extinguishers</b>	There is 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
	<b>Air Quality - Propane/Natural Gas/Methane Gas Detected</b>	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
	<b>Electrical Hazards - Exposed Wires/Open Panels</b>	Any exposed bare wires or openings in electrical panels (capped wires do not pose a risk)
	<b>Electrical Hazards - Water Leaks on/near Electrical Equipment</b>	Any water leaking, puddling or ponding on or immediately near any electrical apparatus that could 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
	<b>Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable</b>	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 Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Indoors	Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping Hazards	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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
	<b>Misaligned Chimney/Ventilation System</b>	A misalignment of an exhaust system on a combustion fuel-fired unit (oil, natural gas, propane, wood pellets etc.) that causes improper or dangerous venting of gases
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable	The roof exhaust fan unit does not function
Sanitary System	Broken/Leaking/Clogged Pipes or Drains	Evidence of active leaks in or around the system components or evidence of standing water, puddles or ponding--a sign of leaks or clogged drains
	Missing Drain/Cleanout/Manhole Covers	A protective cover is missing
<b>Requirements for Common Areas</b>		
<b>Inspectable Item</b>	<b>Observable Deficiency</b>	
Basement/Garage/Carport	Baluster/Side Railings - Damaged	Any damaged or 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 as it should
Halls/Corridors/Stairs	Ceiling - Holes/Missing Tiles/Panels/Cracks	Any 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 paint or is missing paint
Laundry Room	Ceiling - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew--such as a darkened area--over a ceiling area greater than 1 foot square
Lobby	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
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	Any door that is not functioning or cannot be locked because of damage to the frame, threshold, lintel or trim
Patio/Porch/Balcony	Doors - Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked because of damage to the door's hardware
Restrooms	Doors - Damaged Surface (Holes/Paint/Rust/Glass)	Any door that has a hole or holes greater than 1 inch in diameter, significant peeling/cracking/no paint or rust that affects the integrity of the door surface, or broken/missing glass
Storage	Doors - Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Doors - Deteriorated/Missing Seals (Entry Only)	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Doors - Missing Door	Any door that is missing that is required for the functional use of the space
	Dryer Vent - Missing/Damaged/Inoperable	The dryer vent is missing or it is not functioning because it is blocked. Dryer exhaust is not effectively vented to the outside
	Electrical - Blocked Access to Electrical Panel	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Electrical - Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Electrical - Evidence of Leaks/Corrosion	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware
	Electrical - Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	Electrical - Missing Breakers	Any open and/or exposed breaker port
	<b>Electrical - Missing Covers</b>	A cover is missing, which results in exposed visible electrical connections
	Floors - Bulging/Buckling	Any flooring that is bulging, buckling or sagging or a problem with alignment between flooring types
	Floors - Floor Covering Damaged	More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas or exposed seams.
	Floors - Missing Floor/Tiles	More than 5% of the flooring or tile flooring is missing



	Damaged/Missing Screen/Storm/Security Door	Any screen door or storm door that is damaged or is missing screens or glass--shown by an empty frame or frames or any security door that is not functioning or is missing
	Damaged Surface - Holes/Paint/Rusting/Glass/Rotting	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
	Deteriorated/Missing Seals (Entry Only)	The seals/caulking is missing on any entry door, or they are so damaged that they do not function as they should
	Missing Door	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
Electrical System	Blocked Access to Electrical Panel	One or more fixed items or items of sufficient size and weight impede access to the building system's electrical panel during an emergency
	Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident
	Evidence of Leaks/Corrosion	Any corrosion that affects the condition of the components that carry current or any stains or rust on the interior of electrical enclosures or any evidence of water leaks in the enclosure or hardware
	Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire
	GFI - Inoperable	The GFI does not function
	Missing Breakers/Fuses	Any open and/or exposed breaker port
	Missing Covers	A cover is missing, which results in exposed visible electrical connections
Floors	Bulging/Buckling	Any flooring that is bulging, buckling or sagging or a problem with alignment between flooring types
	Floor Covering Damage	More than 10% of floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas or exposed seams.
	Missing Flooring Tiles	Any flooring or tile flooring that is missing
	Peeling/Needs Paint	Any painted flooring that has peeling or missing paint on more than 10% of the surface
	Rot/Deteriorated Subfloor	Any rotted or deteriorated subflooring greater than 6 inches by 6 inches
	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
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 - Sewer Odor Detected	Sewer odors that could pose a health risk if inhaled for prolonged periods
	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
	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 Blocked/Unusable	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 Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion
	Garbage and Debris - Indoors	Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Garbage and Debris - Outdoors	Too much garbage has gathered-more than the planned storage capacity or garbage has gathered in an area not sanctioned for staging or storing garbage or debris
	Hazards - Other	Any general defects or hazards that pose risk of bodily injury
	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm
	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk
	Infestation - Insects	Evidence of infestation of insects-including roaches and ants-throughout a unit or room, food preparation or storage area or other area of building substantial enough to present a health and safety risk
	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
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	There is evidence of active water leaks from hot water heater or related components
	Pressure Relief Valve Missing	There is 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	Missing/Inoperable	Smoke detector is missing or does not function as it should
Stairs	Broken/Damaged/Missing Steps	A step is missing or broken
	Broken/Missing Hand Railing	The hand rail is missing, damaged, loose or otherwise unusable
Walls	Bulging/Buckling	Bulging, buckling or sagging walls or a lack of horizontal alignment
	Damaged	Any 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
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
	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