Housing Rehabilitation Standards

Introduction

The purpose of these standards is to ensure that those who are assisted with rehabilitated housing through the City of Kettering’s Comprehensive Housing Rehab Program are provided housing that is safe, decent and affordable. Furthermore, these standards should ensure that the investment of public and homeowner funds enhances affordability, preserves habitability and is equitable for each beneficiary.

DCD’s Comprehensive Rehab Program addresses all issues affecting the main structure, but can also include site and accessory structure items if determined necessary by the rehab inspector. **These Rehab standards will provide standards for the work under our Comprehensive Rehab Program.** Other DCD initiatives, such as The Emergency Repair programs, address only the specific items in need of attention and the entire structure does not have to be addressed. **For the emergency repair programs (such as electric, plumbing, and exterior hazards) and our handicapped accessibility program only the items specifically being addressed will be required to meet the standards herein.**

These standards provide three major types of information:
- The identified hazardous and substandard conditions that must be corrected on a property receiving comprehensive housing rehab;
- The standard that each component of the property must achieve through assistance under the program;
- The minimum life expectancies for components addressed with the rehab assistance

**All work undertaken must meet or exceed applicable standards and all local codes.** Where required, work must obtain a permit, associated inspections and approvals. Should it be infeasible to meet any standard described herein, the project file must contain a written description of the non-compliant condition and a justification for allowing it to remain. This written description should be reviewed and approved by the Community Development Manager.

The standards that apply to housing being inspected for eligibility for assistance, such as homebuyer assistance, may be different from the standards that will apply to a property being rehabilitated, and additional standards may apply to newly constructed housing. Existing housing that is being inspected for eligibility for purchase assistance must not exhibit any of the substandard or hazardous conditions listed in each section of this document. Such housing may or may not be required to meet the full standard applied to housing that is being rehabilitated or newly constructed.

Definition of Terms:
- CDBG is an acronym for Community Development Block Grant.
- DCD is an acronym for the City of Kettering’s Division of Community Development.
- Life Expectancy is the period of time that the assigned rehabilitation inspector, based on a visual inspection or warranty information, expects a building component to function properly under normal use and care. Life expectancy determinations can and often will be subjective determinations made based on limited information, but may only be changed by the Rehabilitation Specialist or other party designated by the Participating Jurisdiction.

**Important:** The life-expectancy standards in this document or made otherwise by the Housing Rehab Program do not constitute a guarantee in any form, nor do they constitute a stated or implied promise by the DCD or other parties to assure actual life of a component. These standards are merely a general guide to rehabilitation inspectors.

### A. General Features

1. **Inspections**
   A. Inspections will be carried out using the site inspection checklist. All rooms, service porches, exterior areas, accessory buildings, crawl spaces and attic spaces must be included in all inspections. Inspections will include all issues included on the checklist. Deficiencies or hazards that are not on the checklist will be documented. Such inspection to include all yard areas.
   B. If HOME funds are invested, all inspected areas must meet these standards. Exceptions are not permitted for any hazardous condition. Variances from the standard are permitted upon documentation of the condition, and explanation of mitigating measures or circumstances, and authorization by the Housing Rehab Inspector.

2. **Work Specifications and Scope of Repairs**
   A. Work specifications should include enough detail to specify each item to be repaired, the quantity of materials to be used and the exact location of each repair. Each item should have a specific line item cost estimate. Each repair item should be evaluated as complete utilizing the Performance Standards and general knowledge of the work being performed.
   B. Repairs needed to correct basic safety, durability, mechanical and efficiency deficiencies, as defined by DCD, will take precedence over other repairs. The scope of repairs may be limited by budget. See also "Walk-away".
   C. No other work must be done to the project other than the work agreed upon in writing by the homeowner, Housing Staff and contractor or as necessary to remove immediate health and safety dangers during the construction phase.

3. **Cost Estimates** – Cost estimates should be prepared in advance of any bid process by the Rehab Specialist and be detailed for each repair item. Each repair item should include per unit or lump sum price and the number of units to be repaired. Acceptable bids typically must be within 10-15% of the total cost estimate. Some repairs may require the owner to obtain three (3) proposals needed to select a
contractor instead of using specifications prepared by the rehab staff.

4. Procedures and Responsibilities – Program Administrators, Homeowners, Contractors and others must comply with program procedures and guidelines in the execution and implementation of all related activities. Specific responsibilities relating to the Standards include:

A. Homeowners who are selected for services must understand the budget limitations of the program and will be briefed on what services they will receive. Homeowners accepting HOME Program funds in any amount must agree that the specified required repairs must be completed, to be compliant with program requirements.

B. "Walk-away" and sweat equity situations: Homeowners must understand that a thorough inspection of their homes may result in a "walk away" if necessary repairs exceed program limitations as designed. Homes that are denied assistance will be notified and given other alternatives, if possible. If certain repairs are to be undertaken by the homeowner in order to obtain program compliance, those items will be completed prior to program-contracted services, unless otherwise authorized by the Housing Rehab Coordinator.

C. It is the homeowner's responsibility to review the specifications and work write-ups prior to signing a Rehab agreement. Items that are not specified in writing are not part of the Rehab agreement. The scope of services must be discussed in a pre-construction conference at which time the homeowner will receive a copy of all related construction materials including specifications, write-ups and agreements. The homeowner must approve the work specifications prior to bidding. The homeowner's signature on the Rehab agreement will serve to acknowledge awareness of all such documents.

D. It is the homeowner's responsibility to provide access for contractors for rehabilitation construction services including punch list items and warranty work. If reasonable and timely access is denied to a contractor who is attempting to make a good faith effort to make required repairs, housing staff will contact the homeowner to determine what issues exist and initiate next steps in resolving the problem.

E. Except when access is permitted for rehabilitation services, security of the property is the homeowner’s responsibility. Movement, storage and security of personal property are the homeowner’s responsibility. Personal property damaged, displaced or missing during the rehabilitation phase of services should be reported immediately to the Housing Rehab Coordinator, but it is up to the homeowner to pursue damages for such losses. It is recommended that a thorough photographic and written inventory be completed by the homeowner prior to rehabilitation.

F. During rehabilitation the homeowner will not affect repair areas and will make a reasonable effort to stay away from the construction areas.

G. The homeowner must approve each invoiced item on the draw that the contractor has requested and must make a reasonable effort to inspect each
item for which the contractor is claiming payment. By signing the "homeowner approval" the homeowner is verifying that to the best of their understanding, each of the noted repair items has been completed according to the written specifications. If the homeowner is not satisfied with a particular item of repair that is being presented for payment the homeowner may delete this item(s) until such repair is rectified. However, if the homeowner refuses to sign, and the repair is done according to specifications, the homeowner may be responsible for payment to the contractor for time lost. Any such conflicts must be resolved by the Rehabilitation Specialist, based upon the intent of the specifications.

H. Except for reconstruction or other required interruptions, the homeowner must provide all existing utilities for use by the contractor (as they relate to the construction) and must be responsible for continuous maintenance and payment of existing utilities.

5. Materials – All materials used must be new, unless otherwise specified, project-specific and of a good quality. All work must be done with skilled craftsmen and accomplished with care. Contractor must provide samples to the homeowner for selection for all materials as cited in the work specifications and provide reasonable time to the homeowner to make selections. Contractor is encouraged to submit a letter to the Housing Rehab Coordinator, signed by the homeowner, stating that the homeowner approves of colors and quality of items such as, but not limited to; paint, flooring materials, brick, shingles, vinyl siding, door/window/drawer hardware, and counter tops. See also work specifications for identified work tasks that provide for homeowner selections.

6. Completion of Work – Upon completion of construction, the contractor will:
   A. Remove all construction debris from the site;
   B. Clean all floors impacted by the work;
   C. Clean all new and existing paint from other finished surfaces including window glass and mirrors;
   D. Leave all newly installed items in operating condition;
   E. Light gas water heater pilots, stove/oven pilots and gas heater pilots, if impacted by scope of work;
   F. Start all other electrical and mechanical systems;
   G. Put all hardware in operating condition;
   H. Deliver new keys to homeowners for any newly installed hardware.

7. Discovery of Related Work – Defective elements made known to the contractor before or during the construction process must be brought to the immediate attention of the Housing staff and/or homeowner before proceeding with any related work. When repairs are made, the repairs must reasonably match the surrounding materials in original design and dimension as approved by the Community Development staff.
8. **Additional Work** – Where additional work is necessary to make specified repairs or to correct unforeseen dangerous conditions, the contractor must inform housing staff of such condition and submit any necessary information to staff to enable resolution of the situation, enabling work to resume. NO WORK WILL BE AUTHORIZED until a change order is executed in writing by the homeowner, contractor, and the Community Development Division.

9. **Contractor** will be responsible to determine utility needs, to provide adequate sanitary facility(s) and to safely operate equipment on site. Contractor will provide usage of bathroom facilities within the end of a business day, unless other arrangements have been made with the homeowner to avoid relocation expenses.

**B. Site**

1. **Minimum Site Standards**
   
   A. The lot or defined site must be free of debris, garbage or other accumulations of site-stored items that create possibilities of infestations. The site should be generally level, well drained, and accessible.
   
   B. All exterior property and premises must be maintained in a clean, safe, and sanitary condition.
   
   C. Replacement landscaping and grading must direct water away from structures and will be of native and drought resistant.

2. **Hazardous and Substandard Conditions Requiring Correction**
   
   A. Hazardous and substandard conditions include any condition that threatens the health and or safety of the occupants. Substandard conditions include any condition that threatens, defeats or will lead to the lack of functional viability of a single feature of a home. These conditions must include but not be limited to:
   
   1. Accumulated debris, waste, or garbage either in enclosed areas such as storage buildings or in yard areas;
   2. Environmental conditions, such as flooding, mudslides; abnormal air pollution, smoke or dust;
   3. Eroding soil and accumulation of stagnant water;
   4. Excessive noise, vibration or vehicular traffic;
   5. Excessive accumulations of trash;
   6. Excessive weeds or plant growth;
   7. Fire hazards.
   8. Deteriorated and/or irreparable outbuildings, sheds, wells, privies, or other structures that are no longer in use or are made unusable by their condition;
   9. Holes, ditches, exposed meter boxes or other conditions that create a tripping hazard, excluding drainage ditches that are part of a designed drainage system;
   10. Rodents, insects, or other infestations;
   11. Grading that directs water toward any structure.
13. Standing water or depressions that hold water during wet weather, leaking water supply, septic tank back-ups; percolating or leaking sewage;
14. Exposed pipes, railings or other installations creating tripping hazards;
15. Damaged, missing or deteriorated walkways, steps and decks that create tripping hazards or are otherwise unsafe;
16. Stairways or steps with four or more risers and without a functional handrail. Stairways, decks, porches, balconies, and all appurtenances without proper anchorage or capable of supporting the imposed loads.
17. Handrails and guards in poor condition or not properly fastened or capable of supporting normally imposed loads.

C. Improvements to Accessory Structures
1. Minimum Improvements Standards
   A. Paving and Walks
      1. All walkways and decks should be continuous and usable, free from tripping hazards or other defects. Badly deteriorated, essential paving, such as front sidewalks, will be repaired to match. Non-essential deteriorated paving such as sidewalks that are unnecessary, may be removed and appropriately landscaped.
      2. Walkways that include four or more risers should include appropriate handrail and decks more than 30" high should include appropriate guardrail.
      3. Repairs to walkways must have a life expectancy of a minimum of 5 years.
   B. Outbuildings
      1. Unsafe and blighted structures, including, sheds, garages and barns, may be repaired or removed, Discovered lead hazards must be controlled.
      2. Repairs to outbuildings must have a life expectancy of a minimum of 1 year.
   C. Fencing
      1. Deteriorated fencing may be repaired, replaced, or removed. If required to limit access by children, pets or dangerous neighborhood conditions removal will not be an option.
      2. Repairs to fencing must have a life expectancy of a minimum of 3 years. Replacement fencing must have a life expectancy of minimum of 10 years.
   D. Porches, Decks, and required railings
      1. Steps, stairways, and porch decks will be structurally sound, reasonably level, with smooth and even surfaces.
      2. Handrails will be present on one side of all interior and exterior steps or stairways with more than four risers, and guardrails will be present
around porches or platforms over 30" above ground level. 
3. Unsafe or unsightly porches will be repaired. Porch repairs will be structurally sound, with smooth and even decking surfaces. 
4. Repairs to steps, decks, and railing must have a life expectancy of a minimum of 5 years. Replacement steps and decks must have a life expectancy of a minimum of 20 years. Replacement railings, repair or replacement porches, must have a life expectancy of a minimum of 10 years.

2. Hazardous and Substandard Conditions Requiring Correction
   A. Must include conditions that threaten the health and or safety of the occupants.
   B. Tripping hazards in primary walkways or decks caused by upheaval, broken or damaged wood or concrete or other condition creating a hazard.
   C. Any condition not mentioned that meets the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet applicable standards.

D. Extermination
   1. Minimum Extermination Standards
      A. All structures in which insects or rodents are found shall be promptly exterminated by approved processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinestation.
   2. Hazardous and Substandard Conditions Requiring Correction
      A. Must include conditions that threaten the health and or safety of the occupants. These conditions include but are not be limited to:
         1. Infestations of pest, wood destroying insects, or vermin;
         2. Untreated wood having direct ground contact and used for structural purposes;
         3. Cluttered debris or stored materials suitable for rodent or insect habitat.
      B. Other conditions not mentioned here that meets the definition of a hazardous or substandard condition if noted by the rehab inspector.

E. Space and Use
   1. Minimum Space and Use Standards
      A. The dwelling unit must have a living room, a kitchen area, and a bathroom.
      B. Dwelling units shall not be occupied by more occupants than permitted under the City’s minimum area requirements for occupancy.
      C. In order to be considered habitable rooms requirements outlined in items 2 through 7 below must be met.
   2. Minimum Standards for Ceilings
      A. Habitable spaces including hallways, corridors, laundry areas, bathrooms, toilet rooms and habitable basements must have a ceiling height of not less than 7'-0" with the following exceptions:
1. Where beams or girders are spaced not less than four (4) feet on center and project not more than six (6) inches below the required ceiling height.

2. Basement rooms occupied exclusively for laundry, study, or playroom purposes, having a ceiling height of not less than six feet eight inches (6'-8") with not less than six feet four inches (6'-4") of clear height under beams, girders, ducts and similar obstructions.

3. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a clear ceiling height of at least seven (7) feet over not less than one-third (1/3) of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a clear ceiling height of five (5) feet or more shall be included.

3. Minimum Room Widths:
   A. Habitable rooms, other than kitchens, shall not be less than seven (7) feet wide in any plan dimension.

4. Minimum Standards for Kitchens:
   A. Kitchens shall have a minimum floor area of fifty (50) square feet and shall provide clear passageways of not less than three (3) feet between counter fronts, counter fronts and appliances or counter fronts and walls.
   B. All kitchens must have a working refrigerator, cook-top and oven. All equipment must be in proper operating condition.
   C. The kitchen must have a sink in proper operating condition, with a sink trap and hot and cold running water connected to an approvable water supply system and an approvable public or private sewer disposal system.
   D. There must be facilities and services for the sanitary disposal of food waste and refuse, including temporary storage facilities where necessary (e.g., garbage cans).

5. Minimum Standards for Bathrooms
   A. The bathroom must be located in a separate private room with lockable door(s).
   B. The bathroom must have a fixed basin in proper operating condition, with a sink trap and hot and cold running water. The kitchen sink cannot be used as the required lavatory/basin.
   C. The bathroom must have a tub/shower in proper operating condition with hot and cold running water.
   D. A flush toilet in proper operating condition is required.
   E. The bathtub and/or shower may be in the same room as the flush toilet/water closet and lavatory/basin, or said bathtub and/or shower may be in a separate room. The facilities must utilize an approvable water supply system and an approvable waste water disposal system.

6. Minimum Standards for Bedrooms
   A. Every bedroom shall comply with the City’s minimum size requirements for bedrooms. One-person occupancy shall contain at least seventy (70) square feet of floor area. Two or more person occupancy shall contain at
least forty (40) square feet of floor area per occupant.

B. Every bedroom shall have access to at least one (1) water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to at least one (1) water closet and lavatory located within one (1) story (floor) from the story in which the bedroom is located.

C. Bedrooms must not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces, except when the unit contains fewer than two bedrooms.

7. Minimum Standards for Living Rooms
   A. Living rooms for three (3) to five (5) persons shall have a minimum area of 120 square feet and those holding in excess of six (6) persons shall have a minimum area of 150 square feet.

Hazardous and Substandard Conditions Requiring Correction

A. Must include any condition that threatens the health and or safety of the occupants. Substandard conditions include any condition that threatens, defeats or will lead to the lack of functional viability of a single feature of a home. These conditions must include but not be limited to:
   1. Lack of adequate food storage, food preparation area, refrigeration or cooking facilities.
   2. Spaces that are so small as to be unusable or inadequate for their intended purpose.

B. Any other condition not mentioned above that meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

F. Foundations
   1. Minimum Foundation Standards
      A. All foundation walls shall be maintained plumb and free from open cracks and breaks and shall be kept in such condition so as to prevent the entry of rodents.
      B. All newly installed foundations should be designed and constructed in accordance with the currently adopted Residential Building Code.
      C. Repairs to the foundation must have a life expectancy of a minimum of 20 years.

   2. Hazards and Substandard Conditions Requiring Correction
      A. Hazardous conditions include any condition that threatens the health and or safety of the occupants. These conditions should include but not be limited to:
         1. Termite or other wood destroying insect damage to structural members;
         2. Water damage or dry rot to structural members;
         4. Broken, fire damaged or otherwise compromised beams, joist or sills;
5. Unsupported beams, or sills that have inadequate support;
6. Water draining and/or pooling under foundation area;
7. Ground contact of untreated wooden structure;
8. Severe slab cracks that create or threaten structural or other systems

B. Any other condition not mentioned above that meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

G. Floors
1. Minimum Floor System Standards
   A. All flooring must not have any serious defects such as severe bulging or leaning, large holes, loose surface materials, severe buckling, missing parts, or other serious damage.
   B. All sub-floors should be solid and continuous, without liberal movement or bounce, free from rot and deterioration.
   C. All flooring must be free from tripping hazards with a minimum of seams spaced at logical locations such as doorways and matched to the existing floor.
   D. All flooring must be sealed and/or tight at the edges.
   E. Bathroom and kitchen floors shall be covered with water resistant flooring. Damaged wood floors will be repaired.
   F. Basement floors should be continuous concrete. If not, certain appliances located in this area will be properly elevated above grade with concrete blocks.
   G. Repairs to flooring must have a life expectancy of a minimum of 3 years. Replacement flooring must have a life expectancy of a minimum of 6 years, if properly maintained.

2. Hazardous and Substandard Conditions Requiring Correction
   A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants. These conditions should include but not be limited to:
      1. Damaged, rotted or deteriorated sub-floor surfaces;
      2. Torn, missing, worn, burned or otherwise damaged floor coverings that create a tripping hazard or unsanitary condition;
      3. Missing base board, shoe mold or sealant that creates an unsanitary condition;
   B. Any other condition not mentioned which meets the definition of a hazardous or substandard condition should be repaired and/or rehabilitated to meet applicable standards.

H. Walls
1. Minimum Wall System Standards
   A. Repair and Replacement Standards:
      1. Repairs to structural walls must have a life expectancy of a minimum of 15 years.
2. Repairs to interior walls must have a life expectancy of a minimum 5 years. Replacement interior walls must have a life expectancy of a minimum of 10 years.
3. Repairs to exterior surfaces must have a life expectancy of a minimum of 10 years. Replacement exterior surfaces must have a life expectancy of a minimum of 20 years.
4. Repairs to firewalls must have a life expectancy of a minimum of 5 years. Replacement firewalls must have a life expectancy of a minimum of 10 years.

B. All walls including doors and windows should be maintained plumb in good, sanitary condition and free from any serious defects such as: severe bulging or leaning; holes; cracks; breaks; loose surface materials; severe buckling; missing parts; rotting materials; chipped, cracked or peeling paint; falling plaster; or other serious damage.

C. Exterior wall surfaces should be free from chipped, cracking or peeling paint. All such loose paint should be properly prepared, primed, properly painted and maintained weatherproof and properly surface coated where required to prevent deterioration.

D. Exterior siding should be free from gaps, buckling, cracks, rot, termite damage, and holes. All gaps, seams and laps should be properly sealed. All rotted, fire or termite damaged materials should be removed and replaced.

E. Interior wall surfaces including doors and windows, shall be maintained in good, sanitary condition and free from chipping, cracking or peeling paint with no loose, cracked or falling plaster. All such loose paint should be completely removed and bare wood surfaces primed. All primed surfaces should be properly painted.

F. Interior walls should be plumb.

G. When frame walls and floors adjoining other dwellings are gutted, new wall finish installations will conform to local codes for fire ratings.

2. Hazardous and Substandard Conditions Requiring Correction

A. Hazardous conditions should include any condition that threatens the health and/or safety of the occupants. These conditions should include but not be limited to:
   1. Termite or other wood destroying insect damage;
   2. Water damage or dry rot of siding, trim and/or structural members;
   3. Broken, fire damaged or otherwise compromised siding, trim and/or structural members;
   4. Water incursion through wall structure resulting in drywall damage;
   5. Holes, cracks or gaps in interior or exterior wall structures;
   6. Exposed nails, popped seams or other defects not representative of normal wear and tear;
   7. Cracked, peeling, or chipped paint. Exposed unpainted or untreated wood, drywall or other wall surface;

B. Any other condition not mentioned above which meets the definition of a
hazardous or substandard condition as noted by rehab inspector.

I. **Roofs**
   1. Minimum Roof Systems Standards
      A. The roof and flashing must be structurally sound and weather tight.
      B. Missing and leaking shingles and flashing shall be repaired on otherwise functional roofs.
      C. Roof surfaces should be free from defects. No indication of excessive wear or potential failure will be acceptable.
      D. Roof drainage must be adequate to prevent dampness or deterioration in the walls and interior portion of the structure.
      E. Roof drains, gutters, and downspouts must be in good repair and free from obstructions. Roof water discharge shall not be directed toward foundations.
      F. Roofing materials should be applied in accordance with the manufacturer's instructions and prevailing Residential Code.
      G. All rotted or damaged roof sheathing must be removed and replaced.
      H. All replaced sheathing must be of compatible thickness with the existing sheathing thus making the roof sub-surface smooth and free from defects.
      I. Repairs must have a life expectancy of a minimum of 5 years and replacements must have a life expectancy of a minimum of 25 years. Replacements to flat and low-sloping roofing must have a life expectancy of a minimum of 10 years.

   2. Hazardous and Substandard Conditions Requiring Correction
      A. Hazardous conditions should include any condition that threatens the health and/or safety of the occupants. These conditions must include but not be limited to:
         1. Water damage caused by water leaking through the roofing materials;
         2. Missing, worn or upturned shingles, or other visible wear on the exterior of the roof envelope;
         3. Damaged or rusting roof jacks, leads, flashings, drip edges, or other component;
         4. Structural damage evidenced by buckling, sagging, or broken members;
         5. De-lamination of materials, uplifted edges, or other failure of materials or application;
         6. Any condition, including normal wear which, in the best judgment of the inspector, would lead to the failure of the roof envelope within five years;
      B. Any other condition not mentioned above which meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

J. **Windows and Doors**
   1. Minimum Window and Door Standards
      A. Every window, exterior door and basement or cellar hatchway must be
substantially tight, water and rodent-proof, and be kept in a state of maintenance and repair.

B. All exterior doors to the outside or to a common public hall must be solid core and be equipped with adequate security locks. All windows accessible from ground level must be lockable.

C. Every window sash must be;
1. sealed at window panes with an adequate amount of putty. Putty must not be cracked, broken or missing;
2. in good condition and must fit tightly, within its frame;
3. must be capable of being easily opened and shut with appropriate window hardware unless it is a fixed window.

D. Every exterior and interior door, when closed, must fit tightly within its frame.

E. Every exterior and interior door, door hinge, and door latch and/or lock must be maintained in good working condition;

F. Every exterior window, door and frame must be constructed and maintained in such a manner as to be weather tight with adequate weather-stripping. All glazing must be free from cracks or breaks.

G. Every basement or cellar hatchway must be constructed and maintained as to prevent the entrance of rodents, vermin, rain and surface drainage water into the dwelling or structure.

I. Habitable rooms shall have an aggregate glazing area of not less than 7 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated. The following exceptions apply:
1. Glazed areas need not be openable where an approved mechanical ventilation system is provided;
2. Glazed areas need not be installed where the requirement for natural light capable of producing an average illumination of 6 footcandles over the area of the room at a height of 30 inches above the floor is provided

J. A kitchen and or bathroom may pass without a window area, provided, there is a mechanical means of ventilation which is maintained in working order.

K. The requirements for emergency egress from sleeping rooms must be per the current applicable residential building code.

M. Every window or other opening to outdoor space which is used or intended to be used for ventilation, must likewise be supplied with screens covering all of the window areas required for ventilation. The material used for all such screens (doors & windows) must be not less than 16 mesh per 25mm and must be properly installed, maintained and repaired to prevent the entrance of flies, mosquitoes or other insects. Half screens on windows may be allowed, provided, they are properly installed and are bug and insect tight.

N. Replacement of doors (both interior and exterior) and windows must have a life expectancy of a minimum of 10 years.
2. Hazardous and Substandard Conditions Requiring Correction
   A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants. These conditions must include but not be limited to:
      1. Broken, missing or cracked glass;
      2. Rotten or deteriorated sills, frames or trim;
      3. Dried, cracked or missing putty or gasket. Any missing seal or sealant resulting in loose panes or air leaks;
      4. Sealed or blocked windows that are considered the secondary means of egress including windows which have been painted shut, windows which are not operational or windows which will not function as a viable fire exit such as windows with burglar bars which cannot be opened readily from the inside;
      5. Windows that do not lock or locks that do not function with ease;
      6. Any door that is broken, deteriorated, or otherwise damaged so that it does not provide a sealed entry. Any doors which does not shut neatly in order to provide a seal with the passage set or lock set fitting neatly within the strike plate;
      7. Any exterior door which is not solid core, sealed or painted, and which does not have a functioning lockable dead-bolt;
      8. Rotted, deteriorated, or broken thresholds, jambs, frames, trim or other functioning or passive pieces to the door system warrant replacement;
      9. For new construction including reconstruction, windows and/or doors that fail to meet the requirements of all applicable codes.
   B. Any other condition not mentioned which meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

K. Electrical
   1. Minimum Electrical Standards
      A. The minimum electrical service for each dwelling and/or dwelling unit must be 100 amps or based upon a load calculation, whichever is greater.
      B. Service should be of a three-wire type, with service entry on an approved weather head at least 12 feet from grade and may not extend beyond 3 feet unsupported above the roof.
      C. All exposed wiring, service lines and feeders must be protected and properly shielded in approved conduit in locations subject to damage.
      D. All newly installed outlets must be of the grounded type, tamper resistant and spaced a maximum of 12 feet apart. Temporary wiring, extension or zip cords must not be used as permanent wiring.
      E. Every habitable room must have at least one ceiling or wall type electric light fixture, controlled by a wall switch, or a wall type grounded electric convenience outlet controlled by a wall switch.
F. Every toilet room, bathroom, laundry, furnace room must contain at least 1 ceiling or wall type electric light fixture, controlled by a wall switch.

G. All common halls and stairways connected to living spaces must be well lighted with a fixture controlled by a switch located at the ends of the hall or stairway. The fixture shall contain at least a sixty-watt (60) standard incandescent light bulb or equivalent and be spaced a maximum of thirty (30) feet apart for each two hundred (200) square feet of floor area.

H. New kitchen electrical work must be wired to meet the requirements of the N.E.C., based on the size and layout of each individual kitchen.

I. All electric stoves and electric dryers must be supplied with its own proper outlets on dedicated circuits, as applicable.

J. Receptacle convenience outlets installed in or on open porches, breezeways, garages, etc., must be a functioning GFCI protected receptacle with approved covers.

K. Boxes for lights controlled by a pull string must be secured to framing members or otherwise properly supported.

L. All electric lighting fixtures installed on the exterior, must be of the type approved for exterior use.

M. All broken and/or missing switch plates and/or receptacle plates must be replaced.

N. All outlets and fixtures must be in accordance with the electrical code of the city and/or the N.E.C., as applicable. Outlets and fixtures must be properly installed, maintained in working condition and properly connected to the approved source of electric power.

O. All work done must have an approved permit and inspected and approved by the City’s electrical inspector.

P. Life expectancy standards are addressed by the proper application of sections N and O.

2. Hazardous and Substandard Conditions Requiring Correction.

A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants. These conditions must include but not be limited to:

1. Equipment or wiring which is missing, broken, disconnected, loosely connected, burnt, unsupported, corroded, cracked, split, has evidence of overheating, physical damage, or misuse;
2. Device or equipment is dirty, full of debris, infested etc.;
3. Frayed wiring is present;
4. Unshielded, knob and tube wiring is present;
5. Circuit breaker, switch, receptacle, fixed equipment, wiring or cable is not compatible with the phase, voltage, amperage, or other characteristics of the electricity in use;
6. Improper operation of fixed equipment, switches, outlets or other devices or equipment that may overload existing circuitry (i.e. temporary heaters);
7. Flexible cord is used as a permanent wiring method;
8. Interior wiring is surface mounted and not in conduit or raceway. This excludes crawl spaces and other allowable installations where access to wiring is limited;
9. Exterior wiring, which is exposed to damp conditions, sunlight or potential damage and is not in approved conduit;
10. Bathroom and kitchen receptacles located along counter tops, garage receptacles or other outdoor receptacles that are not protected by a ground fault interrupting device;
11. Polarity is reversed in connections or receptacles;
12. Branch circuits, feeders lines, cable size, device rating, circuit breakers, sub-panels or service panels are inadequate for the load as calculated by the current NEC.
13. Circuits that have been expanded past their original design limits;

B. Any other condition not mentioned which meets the definition of a hazardous or substandard condition as noted by the rehab inspector..

L. Lighting
1. Minimum Lighting Systems Standards
   A. At least one overhead or other switch-operated light or switch operated receptacle must be installed in each interior room.
   B. All exterior doorways will be well lit and either switched at the interior side of the door, or the light will be controlled by an automated means (i.e. photoelectric cell or motion detector).

2. Hazardous and Substandard Conditions Requiring Correction
   A. Hazardous conditions should include any condition that threatens the health and or safety of the occupants. These conditions should include but not be limited to:
      1. Missing or non-functional overhead or other switch operated lighting in each interior room;
      2. Missing or non-functional lighting at each exterior door. Such lighting must be operated by an interior switch that is within reach of the door;
   B. Any other condition not mentioned which meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

M. Water Supply and Wastewater Systems
1. Minimum Water Supply and Wastewater Systems Standards
   A. A potable water supply system shall be installed so as to prevent contamination into the potable water supply. Every dwelling unit must have an accessible and properly functioning main shut-off valve with a provision for discharge near the water service entrance point.
   B. Supply lines and fittings for every plumbing fixture shall be installed to prevent backflow. A backflow preventer shall be provided in accordance with
Chapter 24 or the current Residential Building Code for One and Two Family Dwellings.

C. All deteriorated, blocked, inoperable or leaky equipment shall be repaired or replaced.

D. Every dwelling unit must contain a bathtub and/or shower that is properly connected to both hot and cold running water lines under pressure, and must be maintained in working order. Faucets, shut off valves, and plumbing lines should be maintained free from leaks or drips and should be capable of shutting off completely. New tub and shower valves must have balanced – pressure/thermostatic valves.

E. The following shut off valves will be installed when a fixture is replaced:
   1. One owner's shut off at the meter or supply source,
   2. One shut off at each toilet,
   3. One shut off each for hot and cold water at each sink/lavatory.
   4. One supply side shut off at each water heater.

F. Repair and replacement standards:
   1. Replacement showerheads will have maximum flow ratings of 2.5 GPM at 80 PSI and faucets will have maximum flow ratings of 2.2 GPM at 60 PSI.
   2. Replacement toilets will have 1.6 GPFC maximum rating
   3. Existing drain, waste, and vent lines and repairs must be inspected for durable condition; replacements must have a life expectancy of a minimum of 20 years.
   4. Other existing plumbing equipment and fixtures and repairs must be inspected for durable condition. Replacement fixtures must have a life expectancy of a minimum of 20 years.

2. Hazardous and Substandard Conditions Requiring Correction
   A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants. These conditions should include but not be limited to:
      1. Lack of a continuous sanitary water supply. Where ground wells are have been in use, this source should be approved for drinking or a secondary source of drinking water should be available;
      2. Lack of connection to a continuously functioning sanitary wastewater disposal system;
      3. Missing, non-functional or non-existent sanitary facilities including a functioning toilet. The lack of at least one sink and or lavatory for hygiene and at least one sink for kitchen purposes each providing a continuous flow of both hot and cold water. The lack of at least one functional bathing facility;
      4. Deteriorated, rotted, broken or otherwise worn water supply or waste water pipes;
      5. Evident leaks either continuous or intermittent of either wastewater or water supply lines. This includes evidence of pooling underground of
water mains, sewer feeds or septic drain fields;
6. Missing or blocked vent pipes;
7. The lack of fully functioning faucets at each sink/lavatory, bathtub/shower.
8. Any other condition not mentioned which meets the definition of a hazardous or substandard condition as noted by rehab inspector.

N. Mechanical Systems
1. Minimum Mechanical Systems Standards
   A. Each dwelling must be supplied with a functioning heating system.
   B. All heating facilities must be properly installed, be maintained in working condition and be capable of maintaining a room temperature of 68 degrees F. (20 –degrees C.) at a distance 3 feet above the floor in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required, but the heating system must remain operable.
   D. Inoperative, hazardous or inefficient (less than 60% AFUE) heating systems shall be replaced to perform at least at 80% efficiency
   E. Replacement gas and oil fired systems shall be rated at 80% AFUE or better. Heat pumps shall be rated at 13 SEER or better.
   F. Ductwork and radiator piping shall be well supported, insulated in unconditioned space and adequate to maintain the standard lay out in section B. All ductwork shall be insulated to a minimum of E-8, seams sealed when run in concealed space.
   G. The central heating unit must be safe and in good working condition.
   H. Every heat duct, steam pipe, and hot water pipe must be free of leaks and must function so that an adequate amount of heat is delivered where intended;
   I. Every seal between any of the sections of a hot air furnace must be airtight so noxious gases and fumes will not escape into the heat ducts. Flue liners must meet or exceed the requirements of the local building/heating code and must be installed according to same.
   J. All combustion appliances will be provided directly with adequate air for combustion and all such appliances with air or water distribution systems will be sealed off so there is no potential exchange of combustion or exhaust gases.
   K. Every supplied space heater must comply with all of the following requirements:
      1. No space heater burning solid, liquid, or gaseous fuels may be of a portable type;
      2. Every space heater burning solid, liquid, or gaseous fuels must be properly vented to a chimney or duct leading to outdoor space and must be so installed as to provide proper draft (except when a
functioning ODS system and a CO testing device is installed).

L. Unsound chimneys shall be repaired or removed. When chimneys are to be used for combustion ventilation, they shall be lined as required for the fuel used. Unused chimneys will be secured to prevent drafts.

M. Unvented freestanding space heaters must be removed.

N. All "T" valves must be replaced with approved shut off valves.

O. All mechanical work must be inspected and approved by the city's local mechanical/heating inspector.

P. Existing heating and distribution systems must be inspected for durable condition and repairs must have a life expectancy of a minimum of 5 years; replacements must have a life expectancy of a minimum of 10 years. Repairs to chimneys must have a life expectancy of a minimum of 15 years; replacements must have a life expectancy of 20 years.

2. Hazardous and Substandard Conditions Requiring Correction

A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants. These conditions should include but not be limited to:

1. The lack of a steady and dependable heating system, which will be able to provide adequate heat as defined in this section.

2. Open flame gas or propane heaters, which exhaust fumes to the interior, must be removed.

3. Leaking, damaged or inadequate heat exchange units or venting systems, which create the danger of CO, build up;

4. Leaking, corroded or damaged gas supply lines;

5. The lack of a functioning supply shut off valve for each gas or oil fired devices;

6. The lack of a functional pilot light or electric start for each gas or oil fired device;

7. Free standing heaters used for sole source of heat.

O. Water Heaters

1. Minimum Water Heater Standards

A. Water heating facilities shall: be properly installed in accordance with manufacturer’s installation and the requirements of the current residential code, be maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a temperature of not less than one-hundred and ten (110) degrees Fahrenheit. A gas-fired water heater shall not be located in any sleeping room, bathroom, toilet room, storage closet or space that is open to other such rooms unless allowed by Chapter 24, Section G2406 of the current residential code. All water heaters must be properly vented, sealed and equipped with a pressure release valve and discharge pipe.

B. The water supply system shall be installed and maintained to provide a supply of water to plumbing fixtures, devices and appurtenances in sufficient
volume and at pressures adequate to enable the fixtures to function properly, safely, and free from defects and leaks. Each unit should be equipped with a functioning pressure release valve and temperature release valve. Such valves can be a combination thereof. The relief rating shall be adequate to meet the pressure conditions for the appliance or equipment being protected and shall not exceed the tanks rated working pressure. The valve shall be set to open between 25 PSI and 150 PSI above system pressure, but no greater.

C. Fuel fired water heaters shall not be located in rooms used as storage closets. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that combustion air will not be taken from living space except where the unit is a direct vent appliance. When installed in garage areas water heaters having an ignition source shall be located with the ignition source at least 18" above the floor in order to prevent combustion of fuel vapors. Water heaters must be inspected for durable condition; replacements must have minimum life expectancy of 8 years.

2. Hazardous and Substandard Conditions Requiring Correction

A. Hazardous conditions must include any condition that threatens the health and/or safety of the occupants. These conditions should include but not be limited to:
   1. Gas water heaters are prohibited in bathrooms, sleeping rooms, and closets unless they meet the exclusion requirements of Chapter 24 of the current residential code;
   2. Missing gas shut off valve;
   3. Missing water supply shut off valve;
   4. Combustion air taken from living area except when adequate air exchange meets the Ohio Residential Code standards;
   5. Missing or nonfunctional TPL valve. TPL drain shall flow by gravity and shall not connect directly to drainage system and should discharge to an indirect waste receptor or to outdoors. Termination point shall be readily observable by occupant and should not occur more than 6 inches above floor or waste receptor;
   6. Inadequate exhaust pipe. New combustion exhaust should be double walled and skirted at all penetrations;
   7. Storage tanks less than thirty gallons;
   8. Storage tanks that have calcified;
   9. Pipes, nipples or tanks elements that are severely corroded.

B. Any other condition not mentioned that meets the definition of a hazardous or substandard condition as noted by the rehab inspector.

P. Manufactured Housing

1. Minimum Manufactured Housing Standards

A. Please note: The Participating Jurisdiction program is limited to manufactured homes already meeting the following criteria:
B. Manufactured after 1978 and meeting HUD manufacture standard.
C. Installed on a permanent foundation with approved tie downs or attachment.
D. Located on property owned by the occupant.

2. Hazardous and Substandard Conditions Requiring Correction
   A. Hazardous conditions must include any condition that threatens the health and or safety of the occupants.

Q. Lead-Based Paint
   1. All homes constructed before January 1, 1978 will be evaluated for lead-based paint hazards. Please note: This standard is required by federal regulation.
   2. Evaluation will be done by a qualified, certified or licensed person as required under the regulations at 24CFR35. A qualified lead-based paint inspector or risk assessor is certified or regulated by a State or local health or housing agency, or an organization recognized by HUD.
   3. As required under 24 CFR 35, 24 CFR 570.608, 24 CFR 982.401 all lead based hazards will be identified and reduced through paint stabilization, interim controls or abatement as required.
   4. Safe work practices will be followed at all times.
   5. During lead hazard reduction efforts, the work area will be sealed and the family will be protected or relocated as required by the regulations.
   6. Final Clearance will be achieved on all lead hazard reduction activities as required under the regulations.

R. Smoke Detectors
   1. Each dwelling unit must have at least one hard-wired smoke detector, in proper operating condition, on each level of the dwelling unit on the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms, including basements but excepting crawl spaces and unfinished attics. Please note: This standard is required by federal regulation.
   2. Smoke detectors must be installed in each room used for sleeping purposes.
   3. Smoke detectors must be installed in accordance with and meet the requirements of the National Fire Protection Association Standard (NFPA) 74.
   4. If the dwelling unit is occupied by any hearing-impaired person, smoke detectors must have an alarm system, designed for hearing-impaired persons as specified in the National Fire Protection Standard.