

Repair/Replacement Standards

HEALTH AND SAFETY	
Contaminants	
Repair Standard	Minimum Life: 5 years
N/A	
Replacement Standard	
<p>In an ongoing effort to maintain safe and healthy indoor air quality, the use of products and components that contain low levels of VOC's (volatile organic compounds) will be required. Materials utilized in the construction process that generally contain moderate levels of VOCs may include; sealants, paints, caulking, adhesives, plywood, pressed wood products and carpets.</p> <p>Manufacturers typically label or provide information regarding low VOC compliance with the distribution of their products. Several entities that maintain information regarding VOCs and product testing (including respective links) are listed below for reference.</p> <ul style="list-style-type: none"> • VOC Green Program; provides third-party verification services to wood industry and consumer. www.vocgren.com • Green Seal; provides environmental certification standards to assist manufacturers, purchasers and consumers. www.greenseal.org • US Environmental Protection Agency (EPA); Federal agency regulating and providing oversight to protect human health and the environment. www.epa.gov 	

Lead-Based Paint (LBP)	
Repair Standard	Minimum Life: 5 years
<p>For all houses constructed prior to 1978—four (4) floors, two (2) window sills and two (2) window troughs (all randomly selected) plus a blank sample must be submitted to an EPA-accredited lead analytical laboratory and the dust samples must pass a dust wipe test for lead content as per the protocol in the HUD Guidelines. Lead-safe work practices must be followed. In situations where abatement is required, only contractors certified in remediation and abatement will be authorized to perform the work. For more information, please view HUD's website.</p>	
Replacement Standard	Minimum Life: 20 years
<p>When stabilization of surfaces containing Lead-Based Paint is impractical, the most affordable solution for abatement of the component will be chosen. Walls containing Lead-Based Paint may be covered with drywall or gutted and replaced with drywall. Trim and other wood or metal components containing Lead-Based Paint may be removed and replaced with similar materials. Lead-safe work practices must be followed. In situations where abatement is required, only contractors certified in remediation and abatement will be authorized to perform the work. For more information, please view HUD's website.</p>	

Asbestos	
Repair Standard	Minimum Life: N/A
<p>Asbestos materials that are not brittle or crumbling to the extent of creating a hazard such as exterior siding consisting of Portland cement and asbestos fibers, may be left intact and painted, if appropriate. Vinyl-asbestos-tile (VAT) flooring tiles, installed in many U.S. homes from approximately 1930 until 1980, may remain if deemed to be sound and intact. If new flooring is to be installed in areas of the home where sound and intact VAT flooring tile exists, the subject area may be covered with new flooring material and applicable underlayment.</p>	
Replacement Standard	Minimum Life: N/A
<p>Deteriorating asbestos components such as boiler or pipe insulation, cement asbestos siding or vinyl-asbestos-tile (VAT) flooring will be removed and properly disposed of replaced and with suitable non-hazardous materials.</p>	

Radon	
Repair Standard	Minimum Life: 5 years
All housing in this program will be subject to radon testing, laboratory certification and, if required, mitigation requirements as regulated by the PA Department of Environmental Protection (DEP). All testing services, laboratory certification and mitigation activities performed under this program must be conducted by individuals or entities having the appropriate certification(s) as administered by DEP.	
Replacement Standard	Minimum Life: 20 Years
If, as a result of the testing above, there is a presence of Radon at or above the 4 pCi/L level, remediation and mitigation will be performed by an individual or entity with the appropriate certification and constructed in compliance with the PA Department of Environmental Protection regulations.	

Mold	
Repair Standard	Minimum Life: N/A
Visual inspections for mold will be performed and, if detected, steps taken to reduce exposure by preventing and controlling excessive moisture. When repairs or corrections are required for remediation, reference should be made to "Steps to Remove Mold" found in the NCHH (National Center for Healthy Housing) Healthy Housing Solutions found by accessing their on-line publications. www.nchh.org	
Replacement Standard	Minimum Life: N/A
Upon identification of a mold problem, remediation of the moisture source must be managed. Mold may be cleaned in areas of non-porous and semi-porous materials (i.e.; metals, glass, hard plastics, wood and concrete) where determined possible to do so. In areas where mold has been found in porous materials (i.e; fabrics, ceiling tiles, insulation and wallboard), removal and appropriate cleanup will be conducted. The NCHH (National Center for Healthy Housing) provides information outlining potential impact and criteria to help identify, test, reduce exposure and remove/remediate mold hazards.	

Fire Safety-Egress	
Repair Standard	Minimum Life: N/A
N/A	
Replacement Standard	Minimum Life: N/A
Egress windows are required in all new sleeping areas unless other secondary means of escape requirements are met. The minimum dimensions for egress window clear openings are 20" wide by 24" high, and have a clear opening of 5.7 square feet. No bedrooms should be created in attics or basements unless compliance with the PA Uniform Construction Code is met.	

Smoke and Carbon Monoxide Alarms	
Repair Standard	Minimum Life: 5 years
Existing smoke and carbon monoxide alarms must be maintained in operating condition. Installation of additional detectors may be required to meet standards for location and placement. www.nfpa.org	
Replacement Standard	
When walls are open and wiring is exposed, hardwired smoke alarms are required on each dwelling floor and in all bedrooms. Carbon monoxide detectors are required in homes that contain fuel burning equipment and appliances or have an attached garage. In lieu of hardwired alarms, units with wireless interconnect capability may be installed.	

SITE

Grading

Repair Standard

Minimum Life: 5 years

When required construction activity results in necessary repairs or modifications to grading adjacent to the building foundation, it should have a minimum 1/2" per foot slope away from the perimeter to direct all drainage from the structure and alleviate moisture infiltration. All bare and disturbed areas will be restored or reseeded as necessary.

Replacement Standard

Same as Repair

Outbuildings

Repair Standard

Minimum Life: 5 years

If an accessory building has deteriorated to the point where it is deemed to be a potential threat to health, safety and welfare, the structure will be removed. If the outbuilding is structurally sound but requires repairs to correct potential hazards, the grantee may invest funds to repair if deemed financially feasible.

Replacement Standard

No outbuilding replacement is permitted in this program.

Fencing

Repair Standard

Minimum Life: 5 years

If repairs are needed, replacing sections in-kind is permissible, if deemed financially feasible.

Replacement Standard

Same as Repair.

Paving and Walks

Repair Standard

Minimum Life: 5 years

Paving required to facilitate access to the residence, such as front sidewalks and driveways where defects or unsafe conditions exist, will be repaired as necessary. Highly deteriorated paving, such as sidewalks that are unnecessary, will be removed and appropriately landscaped.

Replacement Standard

Unrepairable essential walks and driveways will be replaced with permeable paving or concrete per local ordinance, when financially feasible. Pressure treated wood and/or wood composite handicapped accessible ramps are an eligible expense.

Trees and Shrubbery

Repair Standard

Minimum Life: 5 years

Plant material, that due to location or condition has become unsafe or detrimental to the structure, shall be trimmed, cut or removed as required to mitigate the hazard.

Replacement Standard

N/A

Lawn (DR Only)	
Repair Standard	Minimum Life: 1 year
Bare sections of lawn or areas damaged due to storm event, or disturbed due to construction activity, will be restored and planted with seed varieties conducive to the geographic area and current property conditions. http://pubs.cas.psu.edu	
Replacement Standard	
Same as Repair	

EXTERIOR BUILDING SURFACES	
Exterior Cladding*	
Repair Standard	Minimum Life: 5 years
Siding and trim must be structurally intact and weatherproof. All exterior wood components where deteriorating paint is present will be scraped and primed as necessary and have a minimum of one continuous coat of paint. Buildings designated as historic will have existing wood siding and trim repaired in-kind. New exterior wood will blend with existing and will be primed and painted. Alternate siding materials may be permitted in some instances for historic buildings. "Section 106" consultation is required whenever a new material exterior cladding is proposed for buildings over fifty (50) years of age. Use of a water resistive barrier is required under all newly installed siding and where feasible in areas of repair or replacement	
Replacement Standard	
Buildings not designated as historic may have exterior components replaced or repaired with alternate siding materials to match or blend with the structure's existing style and configuration. If replacing soffit, selected materials should be complimentary to other exterior elements and will be of design to support home air ventilation.	

Exterior Porches**	
Repair Standard	Minimum Life: 5 years
Deteriorated concrete porches will be repaired when possible. Unsafe wood porch components will be repaired with readily available materials to conform closely to historically accurate porches in the neighborhood. Porch repairs will be structurally sound, with smooth and even decking surfaces. Deteriorated wood structural components will be replaced with preservative-treated wood or exterior grade wood composite materials	
Replacement Standard	
Porches on buildings, designated as historic, will be rebuilt to conform closely to historically accurate structures in the neighborhood. Replaced wood structural components will be pressure-treated. The use of exterior grade wood composite or like materials will be permitted for decking, support columns, railing and trim elements if not cost prohibitive. All work performed or elements added to existing porch structures will comply with the PA Uniform Construction Code.	

**When financially-feasible and materials are available, grantees are encouraged to use composite material and/or mold-resistant material, especially in high moisture areas.*

***Caution should be exercised when replacing decking over a crawl space or basement. Need to ensure water does not enter into property after completion.*

Exterior Railings	
Repair Standard	Minimum Life: 5 years
Existing handrails will be structurally sound. Guide rails are required on any accessible area with a walking surface over 30" above finished grade. Structurally sound and compliant railings may be repaired as necessary. On historic structures, railing repairs will be historically-sensitive.	
Replacement Standard	
Handrails will be present on at least one side of all exterior steps or stairs with more than two risers and on the exterior perimeter of porches or platforms when finished floor level exceeds 30" above finished grade. Style and aesthetics of newly constructed handrails and guide rails will conform to the style of similar components of the homes in surrounding neighborhood. On historic designated structures, new railings will be constructed of materials and in design - sensitive to this designation and any applicable architectural guidelines.	

Exterior Steps and Decks	
Repair Standard	Minimum Life: 5 years
Steps, stairs, landings and porch decks will be structurally sound, reasonably level, with smooth and even surfaces required to maintain safe pedestrian use. Any necessary repairs will match and/or complement existing design and materials.	
Replacement Standard	
In non-historic structures, wood decking may be replaced with 5/4" x 6" pressure-treated wood and steps will be constructed from nominal 2" pressure-treated lumber. The use of exterior grade wood composite materials is permitted when not cost prohibitive. On historic structures, new wood decking will be 3/4" clear tongue and groove fir, primed on all 6 sides before installation.	

Exterior House Numbers and Mailboxes	
Repair & Replacement Standard	Minimum Life: 5 years
All properties will have street address numbers installed on the house near front entry or on the mailbox in rural delivery areas. In all cases, address numbers should be of size and location where they easily are visible.	

FOUNDATIONS AND STRUCTURES	
Fire Separation	
Repair Standard	Minimum Life: 5 years
Fire separation or common walls will be maintained without cracks and plaster or wallboard deterioration.	
Replacement Standard	
When frame walls and floors, adjoining other dwellings are gutted, new wall finish installations will conform to the PA Uniform Construction Code requirements for fire ratings where applicable.	

Foundations	
Repair Standard	Minimum Life: 15 years
Foundations will be repaired to be structurally sound, reasonably level, and free from movement.	
Replacement Standard	
Foundation work beyond the repair standard, must comply with the PA Uniform Construction Code.	

Structural Walls	
Repair Standard	Minimum Life: 15 years
Structural framing and masonry will be free from visible deterioration, rot, or serious termite damage, and be adequately sized for current loads. Prior to rehab, all sagging floor joists or rafters will be visually inspected, and significant structural damage and its cause will be corrected.	
Replacement Standard	
New structural walls will be designed and constructed to integrate with existing, but all structural elements must be of size and design to meet load and bearing requirements in compliance with the PA Uniform Construction Code. Newly constructed exterior structural walls must be also be sheathed and insulated per UCC requirements.	

WINDOWS AND DOORS	
Interior Doors	
Repair Standard	Minimum Life: 5 years
Baths and occupied bedrooms will have operating doors and lock sets.	
Replacement Standard	
Interior doors will be hollow-core, medium density fiberboard (MDF), of design and style to coordinate with existing. Interior doors serving bedroom and bathrooms shall include a minimum ANSI/BHMA Grade 2 lockset.	

Exterior Doors	
Repair Standard	Minimum Life: 5 years
Exterior doors* will be solid core and weather tight. The door and hardware must function properly. If the existing entry door does not have a deadbolt, one must be installed having a minimum ANSI/BHMA Grade 2 rating.	
Replacement Standard	
Replacement doors (4) will be solid core with weather stripping and air seal at perimeter and sill. Any glazing must be insulated, double pane glass. Installation must include an exterior lockset and deadbolt, keyed alike, having a minimum ANSI/BHMA Grade 2 rating.	

Windows	
Repair Standard	Minimum Life: 5 Years
All existing windows will open and operate in the manner for which they were originally intended and able to be locked and secured.	
Replacement Standard*	
Windows deemed to be inoperable or unable to be repaired may be replaced with units constructed of vinyl or other alternate material and have and insulated glass. Replacement windows will meet ENERGY STAR certification requirements for the North climate regions. Windows on key facades of historically-sensitive properties will be replaced with units constructed of wood or other like material when locally approved.	

**When the replacement of exterior doors or windows is proposed of alternate material (such as fiberglass door to replace wood or vinyl replacement windows) on structures over 50 years old, Section 106 review is required. For historic structures, the repair of original wood doors and windows is encouraged. In the event exterior door or window replacement is unavoidable on historic buildings, the new units should be of matching design, appearance, placement and material if possible.*

Alternate material units may be utilized for some historic buildings upon consultation with the DCED Historic Preservation Specialist.

Basement Windows	
Repair Standard	Minimum Life: 5 years
Existing basement windows left intact must be operable and able to be secured. When possible, it is desirable to have at least 2 operable basement windows to provide adequate ventilation.	
Replacement Standard (see ** on previous page)	Minimum Life: 5 years
Basement windows below grade that are deemed inoperable or unable to be repaired, may be replaced with hopper or sliding glass units manufactured of vinyl or other alternate material. If windows are in a conditioned basement area, the glass must be of insulated type and meet ENERGY STAR certification requirements for the North climate regions.	

ROOFING	
Flat and Low-Slope Roofing	
Repair Standard	Minimum Life: 5 years
Built-up roofing where no leaks are evident will be re-coated and any flashing, built-in gutters and/or roof penetrations (such as plumbing vents) will be repaired if their minimum life is questionable.	
Replacement Standard	
Installation of an EPDM or functionally equivalent roofing membrane and underlayment as specified by the roofing material manufacturer shall be required	

Pitched Roofs (2/12 or greater)	
Repair Standard	Minimum Life: 5 years
Flashing or shingles in disrepair or in areas where leaks are detected may be repaired when roof is otherwise sound and functional. Slate, metal and tile roofs will be repaired when possible. Roof penetrations no longer being utilized or the presence of rooftop mounted equipment (such as antennas) will be removed at the owner's discretion.	
Replacement Standard	
Roofing shingles shall be of fiberglass -asphalt composition with a Class A (UL790) fire rating and include a minimum 25-year ltd. transferrable warranty issued by the manufacturer. Shingle underlayment of a minimum #15 roofing felt (water repellent breather type cellulose fiber) must be installed over a clean and structurally sound roof decking. The utilization of starter strips, leak barriers, flashing and drip edging, as well as, the means of attachment of the roofing shingles and all other applicable materials must comply with the manufacturer's specifications necessary to validate the warranty and insure overall integrity and durability of the complete roofing system.	
Ridge ventilation will be installed at all ridge locations after proper modifications are made to the ridge board and/or roof sheathing so that the ridge vent will function as designed. In situations where it is deemed unfeasible to install, or the roof design will not allow for a sufficient amount of ridge venting, the installation of other vent types will be required (i.e.; gable louvers, mechanical or power vents)	

Gutters and Downspouts	
Repair Standard	Minimum Life: 5 years
Gutters and downspouts must be in good repair, leak-free, and collect storm water from all lower roof levels. Storm water must be directed away from the building perimeter to prevent water from entering the structure and alleviate the potential for damage to the foundation.	
Replacement Standard	
Gutters and downspouts will be installed and collect storm water from all lower roof levels. Splash blocks and/or downspout extensions will be installed to move water away from the foundation. The system must move all storm water away from the building and prevent water from entering the structure.	

INSULATION AND VENTILATION

Infiltration (CDBG-DR Only)

Repair Standard	Minimum Life: N/A
Seal all accessible gaps and penetrations in the building envelope. If applicable, use low VOC caulk or foam. In buildings with ducted forced-air heating and cooling systems, seal all penetrations of the air distribution system to reduce leakage in order to meet or exceed ENERGY STAR for Homes' duct leakage standard. Ensure continuous unbroken air barrier surrounding all conditioned space and align insulation completely and continuously with the air barrier.	
Replacement Standard	
As stated in Repair Standard.	

Whole House Ventilation (CDBG-DR Only)

Repair Standard	Minimum Life: 5 years
Install an in-unit ventilation system capable of providing adequate fresh air per ASHRAE 62.2 requirements.	
Replacement Standard	
As stated in the Repair Standard.	

Insulation (CDBG-DR Only)

Repair Standard*	Minimum Life: N/A
Attics: For attics with closed floor cavities directly above the conditioned space, blow in insulation per manufacturer's specifications to a minimum density of 3.5 lbs. per cubic foot (CF). For attics with open floor cavities directly above the conditioned space, install insulation to meet or exceed IECC levels.	
Floors: Install minimum R-19 insulation in contact with the subfloor in buildings with floor systems over vented crawl spaces. Install a 6-mil vapor barrier in contact with 100% of the floor of the crawl space (the ground), overlapping seams and piers at least 6 inches.	
Replacement Standard	Minimum Life: 20 Years
As stated in Repair Standard.	

Bath Ventilation

Repair Standard	Minimum Life: N/A
N/A	
Replacement Standard	Minimum Life: 10 Years
Bathrooms which include a shower and/or bathtub must incorporate the use of a bathroom ventilation fan capable of exhausting a minimum of 80 cfm to the exterior of the home. Fan to be controlled by a wall mounted switch/timer control.	

**As designated in HUD CPD Green Building Retrofit Checklist, a complete copy of which is included in entirety as an addendum. Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.*

Kitchen Ventilation	
Repair Standard	Minimum Life: 5 years
All kitchens must have functioning mechanical ventilation above or adjacent to the range/cooking surface. The fan must be capable of producing air movement no less than 160 cfm.	
Replacement Standard	
All kitchens will have mechanical ventilation producing a minimum of 160 cfm and must exhaust to exterior of the home. All venting duct will be constructed of heavy gauge galvanized metal, air tight with mastic-sealed seams (no duct tape) and terminated with an exterior vent cap appropriate for selected location. If deemed unfeasible to provide ventilation to exterior of home, a non-vented range hood with ventilation fan capable of providing 160 cfm may be utilized. If a non-vented kitchen fan/range hood is determined to be the viable alternative, the unit must incorporate a ductless venting filter to aid in the removal of smoke and odors created as a byproduct of cooking.	

Roof Ventilation	
Repair Standard	Minimum Life: 5 years
1 square foot of free venting must be supplied for every 300 SF of area directly under the roof.	
Replacement Standard	
The venting requirement is the same as with the Repair Standard above with a strong preference for a combination of ridge vents, soffit vents and the one perm-rated ceiling required for the 1 to 300 ratio.	

INTERIOR STANDARDS	
Interior Walls and Ceilings	
Repair Standard	Minimum Life: 5 years
Holes, cracks and deteriorated or damaged areas of wallboard or plaster will be repaired as necessary. All visual surfaces will be stabilized to minimize lead paint hazards using premium vinyl acrylic paint.	
Replacement Standard	
When necessary, plaster will be replaced by ½" gypsum board. Fire-rated assemblies will be specified on a project-by-project basis as required by the PA Uniform Construction Code.	

Flooring	
Repair Standard	Minimum Life: 5 years
Bathroom, kitchen and other moisture-prone floor areas will have moisture -resistant flooring intact and in sound condition. Damaged areas, or where hazards may exist, will be repaired. Existing wood floors in rooms other than kitchens or baths, may be repaired and refinished when determined to be viable and in sound condition. *Basement floors will be continuous concrete at least 3-1/2" thick. (*CDBG-DR Only).	
Replacement Standard	
Baths and kitchens will have installed resilient sheet goods or tile over plywood or other appropriate underlayment. Floors in rooms, other than kitchens or baths, may be finished with carpet and associated products that are Carpet and Rug Institute's Green Label certified or laminate materials that are identified as containing low levels of VOCs (volatile organic compounds). Existing wood floors, in rooms other than kitchens or baths, may be refinished when determined to be viable and in sound condition. *New basement slabs will be at least 3-1/2" thick and have a 6-mil vapor barrier. (*CDBG-DR Only)	

Closets	
Repair Standard	Minimum Life: 5 years
Existing closets will be maintained in good repair and have appropriate shelf and clothes rod.	
Replacement Standard	
New closets may be created if there is a significant lack of storage space and the budget permits. New closets will have a depth of 2 feet and include a shelf and clothes rod.	

Kitchen Cabinets and Countertops	
Repair Standard	Minimum Life: 5 years
Kitchens will have functional base and wall cabinets determined to be sound and cleanable. Countertop surfaces should be manufactured of a non-permeable material able to be cleaned and maintained to minimize bacterial growth from food borne contaminants. Existing cabinets with doors and face frames may be repaired if in good condition.	
Replacement Standard	
When new replacement kitchen cabinets are required, the installation will include coordinating base and wall cabinets with high pressure laminate (HPL) countertops including 4" high backsplash. Cabinet construction will include hardwood face frames, door and drawer fronts and meet ANSI/KCMA A161.1 performance and construction standards.	

ELECTRIC	
Ground Fault Circuit Interrupters	
Repair Standard	Minimum Life: 5 years
GFCI protection is required for all receptacles located in bathroom areas, receptacles that serve kitchen countertop surfaces and receptacles located within 6 ft. of the outside edge of a water supply fixture. If unprotected receptacles are in use at any of the aforementioned locations, installation of a GFCI-protected device is required. If the areas in question are served by existing 2-wire NM cable without ground, a GFCI – receptacle may still be installed if marked "NO EQUIPMENT GROUND".*	
Replacement Standard	
Electrical work which may incorporate the installation of new receptacles in areas of the home which include the following; any portion of bathrooms or kitchens as described in Repair Standard.	

Passage Lighting	
Repair Standard	Minimum Life: 5 years
All light fixtures and switches in hallways, stairs and other passageways will operate safely and be of size and design, to provide adequate illumination. Existing fixtures with incandescent lamp fittings will be replaced with LED units providing a minimum 800 lumens (60 watt equivalent).	
Replacement Standard	
In hallways, stairs or rooms where it is necessary to pass through in order to access other rooms and stairways, lighting fixtures of size and design to provide adequate illumination will be installed and controlled by 3-way wall switches located at each end of the travel path. Attics, basements and crawl spaces must have lamp fixtures. Properly installed wire mold (conduit) will be permitted where it may be cost prohibitive to install wiring in wall and ceiling cavities.	

**The equipment grounding conductor plays no part in the operation of a GFCI, so ground-fault protection will still be provided on a 2-wire circuit without an equipment-grounding conductor*

Kitchen Electric Distribution	
Repair Standard	Minimum Life: 5 years
Existing receptacles, fixtures and switches will be safe and grounded.	
Replacement Standard	
Stoves, refrigerators, freezers, dishwashers and disposals, washers and dryers will have separate circuits sized to National Electric Code per the PA Uniform Construction Code. Two separate 20-amp counter circuits are required with each kitchen area.	

Interior Electric Distribution	
Repair Standard	Minimum Life: -5 years
Exposed knob and tube will be replaced. Every room will have a minimum of two duplex receptacles, placed on separate walls and one light fixture or receptacle switched at each room entrance. Where the source wiring circuit is accessible (e.g. first floor above basements, in gutted rooms, etc.), receptacles will be grounded. All switch, receptacle, and junction boxes will have appropriate cover plates. Wiring must be free from hazard, and all circuits will be properly protected at the panel. Floor receptacles will be removed and a metal cover plate installed or flooring/subfloor repaired as necessary Exposed wiremold (conduit) will be permitted where it is not feasible to install wiring in wall or joist cavity. Bedroom receptacles must have Arc Fault protection, either at outlet or thru circuit at service panel. There must be one electrical receptacle at the service panel location Basements will have adequate keyless bare bulb fixtures switched at the top of the stairs and at any other point of entry or exit.	
Replacement Standard	
When a room's wall finishes are removed, it will be rewired to the latest version of the National Electric Code, per PA Uniform Construction Code.	

Service and Panel	
Repair Standard	Minimum Life: 10 years
Distribution panels will have a main disconnect, at least 10 circuit-breaker-protected circuits, a 100-amp minimum capacity and be adequate to safely supply existing and proposed devices. If a working central air conditioning system is present, the minimum service will be 200amps.	
Replacement Standard	
200-amp service with a main disconnect panel containing at least 30 circuit breaker positions.	

PLUMBING SYSTEM

Drain, Waste, and Vent Lines

Repair Standard

Minimum Life: 5 years

Waste and vent lines must function without losing the trap seal.

Replacement Standard

When walls are removed exposing vent and waste lines those lines will be reworked to the current mechanical code per PA Uniform Construction Code

Plumbing Fixtures*

Repair Standard

Minimum Life: 5 years

All fixtures and faucets will have working, drip-free components. All plumbing fixtures must be properly connected to either a public sewer system or an approved private sewage disposal system.

Replacement Standard

Vitreous china bathroom lav/basin (or other non-pervious material designed for residential baths) having single lever, metal faucet with 5-year limited warranty and maximum 1.5 GPM flow. Vitreous china, comfort-height toilets with maximum 1.28 GPF. Double bowl stainless steel kitchen sink with single-lever metal faucet having 5-year limited warranty with maximum 2.0 GPM flow. Bathtubs, showers or combination bathtub/shower units and surrounds will be constructed of fiberglass or acrylic composites and have maximum 2.0 GPM showerhead.

Plumbing Minimum Equipment

Repair Standard

Minimum Life: 5 years

Existing equipment will be repaired to conform to the Housing Quality Standards.

Replacement Standard

Every dwelling unit will have a minimum of one stainless steel double bowl sink in the kitchen and at least one bathroom containing a lav/basin and shower and/or bathtub unit with required water flow devices, all with hot and cold running water and one water closet/toilet as described above.

Water Heaters

Repair Standard

Minimum Life: -5 years

Each housing unit will have working domestic water heating equipment installed and operating in a safe manner.

Replacement Standard

When the installation of a water heater is required, the units will be a minimum of 40-gallon with a 5-year limited warranty, installed in compliance with PA Uniform Construction Code.

Water and Wastewater Distribution

Repair Standard

Minimum Life: 10 years

The main shut off valve must be operable and completely stop the flow of water to the house. All fixtures must be leak-free and deliver sufficient cold water and, where applicable, hot water. Residences must be properly connected to either a public sewer system or an approved private sewage disposal system. If the property is served by a private, on-lot sewage disposal system a copy of the most recent pumping/inspection report must be obtained through the officiating Sewage Enforcement Officer, demonstrating the system is compliant with PA Department of Environmental Protection and any applicable local regulations. If any deficiencies are noted or if actions are required to bring the system into compliance, those issues must be addressed and approved by the Sewage Enforcement Officer.

Replacement Standard

The main shut off valve must be operable and completely stop the flow of water to the house, and should be replaced if it does not. Lead and galvanized pipe that is part of the water service or the distribution system will be replaced with supply piping, valves and accessories in compliance with the PA Uniform Construction Code. One freeze-protected exterior hose bib is required.

*Recommend using water conservation measures (1.3 GPF toilets and 2.0 GPM showers), when available.

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)

Air Conditioning

Repair Standard	Minimum Life: N/A
Non-functioning, non-repairable air conditioners will be removed and drained of all CFCs, in accordance with DEP's approved disposal standards. Existing central air conditioning will be inspected, serviced and refurbished to operate properly.	
Replacement Standard	Minimum Life:
None	

Chimney Repair

Repair Standard	Minimum Life: N/A
Chimneys no longer utilized and in a state of disrepair or deterioration will be removed to below the roof decking when a new roof is being installed. (Removal of a chimney requires Section 106 review if the building is over 50 years of age). When chimneys must be used for combustion ventilation, they will be inspected and repaired or relined as necessary.	
Replacement Standard	Minimum Life: N/A
The creation of new flues is not recommended in this program. The use of high efficiency closed combustion appliances is recommended to avoid the need for new flues. When necessary, chimney flue liners may utilized and will be of material and design required for the type of fuel burning appliance and configuration of the chimney.	

Distribution System

Repair Standard	Minimum Life: 5 years
Duct work and hot water or steam piping will be well supported and in sound operating condition to provide adequate heat supply in areas served. Defective duct work and hot water or steam piping will be repaired when possible.	
Replacement Standard	Minimum Life: 25 years
All duct work will be insulated to R-8, sealed at all seams with mastic (not tape).	

Heating System

Repair Standard	Minimum Life: 5 years
Workable existing heating systems will be inspected and maintained to operate in a safe and efficient manner. Repairs, including replacement of any applicable filters, will be conducted when necessary.	
Replacement Standard	Minimum Life: 25 years
Gas-fired heating plants will be rated at > 92% AFUE or better. Oil-fired furnaces will be rated at > 83% AFUE or better. Oil-fired boilers will be rated at > 85% AFUE or better. Heat pumps will be rated at > 15 SEER. Setback thermostats are required. Electric resistance heating units may be retained or installed in areas where it is not cost effective to heat via ductwork or hot water piping from primary heating source.	

APPLIANCES

Kitchen Appliances

Repair Standard	Minimum Life: 5 years
All units will have a range with properly operating cooktop and oven.	
Replacement Standard	Minimum Life: 15 years
All replaced kitchen ranges will have ENERGY STAR certified appliances, where applicable.	