

Rehabilitation Standards

For HOME and Housing Trust Fund Rental Development

At a minimum, housing to be rehabilitated using HOME and/or Housing Trust Fund financing must be rehabilitated or repaired to meet the following requirements:

1. HEALTH AND SAFETY: The property must be inspected for health and safety hazards and deficiencies, and any such deficiencies must be addressed immediately (within 48 hours) after acquisition (or commitment of funds, if later), if the affected unit is to remain occupied, or the affected common area is to remain in use.
2. BUILDING CODE: In the absence of local building codes, the housing must be rehabilitated to meet the International Existing Building Code of the International Code Council. The general contractor or architect shall certify compliance with the applicable code.
3. LEAD BASED PAINT: Buildings must be rehabilitated in compliance with the HUD Lead Based Paint standard at 24 CFR Part 35, Subpart J. If necessary, developer must provide for relocation of any occupants from units or buildings where rehabilitation has the potential to create or disturb lead paint hazards. http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title24/24cfr35_main_02.tpl
4. UPCS: Rehabilitation must, *at a minimum*, ensure that all buildings and units, on completion, meet the Uniform Physical Condition Standards for Multifamily and Single Family Housing Rehabilitation. Appendix A identifies the minimum UPCS requirements to be addressed in the rehabilitation inspection and Scope of Work. <https://www.hudexchange.info/onecpd/assets/File/HTF-FAQ-Appendices-UPCS-for-Multifamily-and-Single-Family-Housing-Rehabilitation.pdf>
5. SYSTEMS: Major systems, including structural support, roofing, cladding and weatherproofing, plumbing, electrical and HVAC, must be replaced or repaired based on an estimated useful life of the systems. If the estimated life is less than 5 years, the system should be replaced. If the useful life of any component is estimated at less than the affordability period, adequate

reserve contributions must be scheduled to ensure funds for replacement when anticipated.

6. CAPITAL NEEDS ASSESSMENT: For projects of 12 units or more, a capital needs assessment must be performed by an independent party, and scope of work determined based on that assessment. The CNA and scope of work must be reviewed and approved by KHRC prior to commencement of work.
7. ACCESSIBILITY: The accessibility requirements of Section 504 of the Rehabilitation Act of 1973 apply, as well as Titles II and III of the ADA, and the requirements of the Fair Housing Act. HUD Notice CPD-00-09 (<https://www.hudexchange.info/resources/documents/Notice-CPD-00-09-Section-504-Fair-Housing-Act-HOME-CDBG.pdf>) describes the requirements of Section 504 as they relate to the HOME and CDBG programs. Kansas projects funded using the HTF may use this notice as guidance.
 - a. For multifamily projects (4 or more units) undergoing ‘substantial alterations’ (15 or more units total, with rehab costs at or above 75% of replacement cost of the completed facility), at least 5% of the units must meet UFAS standards for physical accessibility, and 2% must be accessible to individuals with sensory impairments.
 - b. For rehabilitation below that threshold, units must be made accessible to the maximum extent feasible, up to the 5%/2% requirement; and if alteration of elements within a unit amount to a ‘substantial alteration’ of that unit, it must be made accessible to UFAS standards, up to 5% of the total units.
 - c. All modifications, regardless of project size or building configuration, must take accessibility into account. When moving or altering entrances and doorways, installing walkways, remodeling bathrooms, relocating switches and controls, etc., reasonable measures must be taken to enhance usability and accessibility.
8. ENERGY EFFICIENCY: The scope of work must include measures to improve the energy efficiency and reduce water usage in the unit. If replacing HVAC equipment, doors and windows, appliances, lighting equipment, etc., such replacement must be with equipment that meets or exceeds current standards for energy efficiency. If equipment is not to be replaced during rehab, but is budgeted with reserves for later replacement, the subsequent

replacement must be with energy efficient equipment. Buildings undergoing 'substantial alteration' shall be improved to meet the current energy standard for federally assisted housing (currently IECC 2009).

- a. Furnaces shall be a minimum 92% efficient.
 - b. Air conditioning shall be a minimum of 14 SEER.
 - c. Air source heat pumps shall be a minimum HSPF of 8.5.
 - d. Windows shall have a U-value of <.30.
 - e. Appliance replacement must be with Energy Star units, if available.
 - f. Insulation shall be added where possible to a minimum attic value of R-38 (R-49 preferred). Wall insulation should be evaluated, and blown in cellulose or similar used, when feasible, to get an R-13 rating.
 - g. Careful attention must be paid to air sealing, including doors and windows, wall or attic penetrations, access panels, etc.
 - h. Certification by an approved energy rater of post-rehab HERS scores at 85 or below is an acceptable substitute for specific prescriptive specifications, and may provide design flexibility.
 - i. Energy rating by an approved rater, with blower door test and recommendations is required for projects involving 'substantial rehabilitation, or of 6 units or more. For multifamily buildings, a representative sampling is acceptable.
 - j. EXCEPTIONS: Waivers may be granted to specific elements or requirements for projects where doing so is not architecturally feasible (e.g., restoration of an historic property).
9. LOCAL AND STATE REQUIREMENTS: All housing rehabilitated with HOME and/or HTF funds shall comply with state and local building codes, property standards, occupancy standards, disaster mitigation requirements, and other ordinances and zoning requirements.
10. ENVIRONMENTAL REVIEW: Projects funded with HOME or HTF are subject to an environmental review process, which may result in specific requirements as conditions of approval. The scope of work must address any such conditions, and documentation must be provided to verify compliance. Examples include, but are not limited to, asbestos removal, radon mitigation, noise attenuation, historic preservation, lead hazard

remediation, etc. No rehabilitation may take place prior to completion and approval of the environmental review.

Reference: 24 CFR Parts 92 and 93, the IEBC, 24 CFR Parts 8 and 35, 24 CFR 100.205, and the UPCS Standards at 24 CFR 5.703 are incorporated in this document by reference, and should be consulted for a complete understanding of the requirements.

Kansas Housing Resources Corporation reserves the right to update and amend this document periodically to incorporate new or revised information.

KHRC Rehabilitation Standards - UPCS Inspectable Items

<p>KHRC Rehab Standards Appendix A: Uniform Physical Condition Standards for Multifamily Housing of Single Family Rehabilitation</p>	<p><i>NOTE: Deficiencies highlighted in yellow are life-threatening and must be addressed immediately, if occupied or before occupancy.</i></p>		
<p><i>Inspectable Item</i></p>	<p><i>Observable Deficiency</i></p>	<p><i>Type and Degree of Deficiency that must be addressed</i></p>	<p><i>Minimum Rehab Standard</i></p>
<p>Health, Safety and Life Threatening Conditions - All Areas</p>			
<p>Air quality</p>	<p>Air Quality - Fire Hazard - Propane/Natural Gas/Methane Gas</p>	<p>Any propane, natural gas or methane leaks or odors detected that could pose a risk of explosion/ fire and/or health risk from inhalation</p>	<p>All gas lines and appliances must be inspected for leaks or potential leaks, and corrected by a licensed professional. Immediate evacuation or occupied buildings and adjacent areas is required if detected.</p>
<p>Electrical</p>	<p>Electrical Hazards - Exposed Wires/Open Panels</p>	<p>Any exposed bare wires or openings in electrical panels</p>	<p>Entire electrical system shall be inspected and hazards or potential hazards corrected</p>
	<p>Electrical Hazards - Water Leaks on/near Electrical Equipment</p>	<p>Any water leaking, puddling or ponding on or immediately near any electrical apparatus</p>	<p>Electrical system shall be inspected for proximity to water sources, and potential hazards corrected or eliminated by qualified professionals</p>

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<p>Fire Safety and Flammables</p>	<p>Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable</p>	<p>An exit which is not accessible or easily usable because a door or window is nailed shut, a lock is broken, panic hardware is chained, debris, storage, or other obstructions exist</p>	<p>All fire exits including egress windows shall be inspected and determined to be clear, usable, and accessible; and any corrections made prior to occupancy</p>
	<p>Emergency Fire Exits - Missing Exit Signs</p>	<p>Exit signs that clearly identify all emergency exits are missing or there is no illumination in the area of the sign</p>	<p>Exit signs, if required by state or local codes or regulations, shall be present, in good condition, and illuminated.</p>
	<p>Windows - Security Bars Prevent Egress</p>	<p>The ability to exit through the window is limited by security bars that do not function properly and, therefore, pose safety risks</p>	<p>If present, window bars must be in good condition and easily operated to allow safe, quick egress</p>
	<p>Fire Escape - Blocked Egress/Ladders</p>	<p>Obstructions restrict or block people from exiting</p>	<p>Routes to, from and through the unit must be accessible and clear of obstruction. with a minimum 36" clear route and 32" clear openings where feasible. Window egress, fire escapes and ladders, if present, must be unobstructed.</p>
	<p>Smoke Detector - Missing/Inoperable</p>	<p>Operable smoke detectors are required in each bedroom or sleeping area, in the vicinity outside of sleeping rooms, and on each level of the common living area. Hard wired, interconnected, with battery backup.</p>	<p>Smoke detectors must be present and operable in each bedroom, aforementioned areas, and in any other locations as required by applicable state or local codes and regulations. Smoke detectors are to be hard wired and interconnected with battery backup</p>

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	Flammable Materials - Improperly Stored	Flammable materials are improperly stored, causing the potential risk of fire or explosion	Any flammable materials that must be stored onsite shall be in secure and fire-safe storage.
	Missing/Damaged/Expired Extinguishers	There is missing, damaged or expired fire extinguisher an any area of the building where a fire extinguisher is required	Fire extinguishers, if required, or if otherwise provided by owner, shall be inspected and maintained as required by state or local codes and regulations and shall have inspection tags verifying such.
	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	Ventilation of exhaust gases from combustion appliances must be in conformance with local codes and manufacturer specifications, and must provide positive ventilation of such gases from the building.
Fire Protection	Missing Sprinkler Head	Sprinkler system is missing parts for operation	If required or otherwise present, sprinkler systems must be complete, intact, operational, and subject to regular inspection by qualified professional.
Other Health and Safety - All Areas			
Health, Safety and Life Threatening Conditions	Address all above as applicable		
Air Quality	Sewer odors	Sewer odors, any	DWV shall be inspected by a qualified professional and must in intact condition, free of obstructions, and must drain and vent properly. Necessary corrections to be performed by a licensed plumber.

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Air Quality	Radon	Tested radon levels at or above 4.0 pCi/l	Each building ground floor level shall be tested by a qualified radon professional; if levels >4.0 pCi/l are detected, retesting at same location is required. If below 4.0, test a third time. If two readings are above 4.0, submit a mitigation plan to KHRC for approval.
Air Quality	Mold and/or mildew	Evidence of mold or mildew	All interior surfaces must be free of mold, mildew, or moist conditions which are conducive to the growth of such. Rehab scope shall include cleaning, repair and correction of any mold inducing conditions, and shall provide for adequate ventilation and air exchange within the buildings, including powered mechanical ventilation if indicated.
Electrical	Missing/Broken Cover Plates	An outlet or switch has a broken cover plate over a junction box or the cover plate is missing or not fitting correctly	All outlets, switches and boxes must have intact covers that are appropriate to each fixture.
Other Hazards	Garbage and Debris - Indoors and Outdoors	Inadequate storage capacity, or storage in areas not sanctioned for staging or storing garbage or debris	Rehab scope shall provide for secure, accessible storage for solid waste in an appropriate location, and of adequate volume to contain garbage and debris generated between removal times. Removal times shall be not less than weekly.

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Other Hazards	Hazards - Sharp Edges	Any physical defect that could cause cutting or breaking of human skin or other bodily harm	Site and buildings shall be free of hazards involving sharp edges, such as exposed rebar or other metal, broken glass, etc. Inspection shall identify, and scope of work shall include mitigation or correction of any such hazards
Other Hazards	Hazards - Tripping	Any physical defect in walkways or other travelled area that poses a tripping risk	Walkways and travelled areas shall be safe and free of defects or unnecessary obstructions or abrupt and unexpected elevation changes
Other Hazards	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	Elevators, if present, shall operate properly and be free of tripping hazards. Regular inspections shall be performed by qualified professionals
Pool or other areas	Fencing - Damaged/Not Intact	Any damage that could compromise the integrity of the fence	If present, pools and other potentially dangerous areas must be securely fenced and lockable, and must comply with state or local codes.
Pests	Infestation - Insects	Evidence of infestation of insects- including roaches and ants	The property shall be free of infestations or conditions which might create or harbor infestations, including overgrowth of vegetation, unsealed areas where pests can enter, sources of water and food, etc. If signs of infestation are present, treatment shall be provided by a licensed pest control firm.

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Pests	Infestation - Rats/Mice/Vermin	Evidence of rats or mice-- sightings, rat or mouse holes, or droppings	Property shall be inspected for indications of infestation. If present, mitigation by a qualified professional is required. Clean area, bait or trap for rodents, inspect for, repair and seal access points in area and building.
Other Hazards	Hazards - Other	Any general defects or hazards that pose risk of bodily injury	The property shall be inspected for any potential hazards not otherwise identified in this document, and scope of work shall include mitigation of any such hazard.
Site Requirements			
Health, Safety and Life Threatening Conditions	Address all above as applicable		
Mailboxes/Project Signs	Mailbox Missing/Damaged	Mailbox cannot be locked or is missing	Mailboxes shall be provided, whether individual or central, that are lockable and compliant with USPS requirements. May be in common area inside of buildings if permitted by USPS.

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<p>Grounds</p>	<p>Erosion and drainage</p>	<p>Site does not drain positively away from buildings. Runoff is displacing or may displace soils or eroding surfaces around structures and on usable areas of the site.</p>	<p>Site must drain positively away from buildings with minimal to no erosion. Repair eroded or damaged soil areas, and any structures, paving or other features which have been affected. Fill, grade and landscape as appropriate to provide positive drainage, eliminate erosion or ponding, and to create vegetative or other means of stabilizing and holding soil.</p>
<p>Grounds</p>	<p>Overgrown/Penetrating Vegetation</p>	<p>Overgrowth of vegetation risks damaging a component, area or system of the property or makes areas unusable for the intended purpose</p>	<p>Site and buildings shall be free from overgrown or penetrating vegetation. Remove vegetation as needed. Replacement should be with appropriate low maintenance, drought tolerant species and landscape materials to create an attractive, safe, and usable outdoor space. Repair or replace any site or building components damaged by overgrowth.</p>
<p>Grounds</p>	<p>Signs Damaged or missing</p>	<p>Property signage including those required for traffic control, accessibility, and visitor/resident convenience are missing, damaged, incorrectly placed or illegible</p>	<p>Required signage (e.g., handicapped parking, fire lanes, etc.) must be present. Ensure that required signage is in good condition, legible, properly sized and placed. Required accessibility signage must be present and compliant with applicable regulations and requirements.</p>

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<p>Parking Lots/Driveways/Roads</p>	<p>Cracks, ponding, potholes, loose material, settlement/heaving</p>	<p>Paving is to be structurally sound with smooth surfaces free of significant defects (cracks, potholes, settling, trip hazards or other safety risks, or loose materials (unless designed as such, e.g. for permeability)</p>	<p>Paving materials shall be inspected to ensure they are structurally sound, smooth, and free of significant defects. The scope of work shall include needed repairs or replacement.</p>
<p>Play Areas and Equipment</p>	<p>Damaged/Broken Equipment, deteriorated surfaces</p>	<p>Paving is to be structurally sound with smooth surfaces free of significant defects (cracks, potholes, settling, trip hazards or other safety risks, or loose materials (unless designed as such, e.g. for permeability)</p>	<p>Play equipment and surfaces shall be safe, maintained in good condition, and free from hazards such as lead paint, sharp or protruding objects, rusty or deteriorating components. Remove or fully repair damaged equipment. Replace as appropriate to property use and amenities agreed to in project proposal.</p>
<p>Refuse Disposal</p>	<p>Broken/Damaged Enclosure-Inadequate Outside Storage Space</p>	<p>A wall or gate of the enclosure is damaged; gate is not easily operable; trash container is too small to store refuse until disposal; or trash storage is not accessible to persons with mobility impairments</p>	<p>Trash enclosures shall be structurally sound, and adequately sized to contain the receptacle(s). Repair or replace trash enclosures as necessary to ensure safe, accessible and adequate storage area for occupants to deposit trash until scheduled disposal</p>

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<p>Retaining Walls</p>	<p>Damaged/Falling/Leaning</p>	<p>A retaining wall is damaged and does not function as it should or is a safety risk</p>	<p>Retaining walls, where present, must be in good repair and structurally sound. Repair or replace damaged wall if needed for soil retention, erosion prevention, management of runoff, etc., or is desired for aesthetic purposes.</p>
<p>Storm Drainage</p>	<p>Damaged/Obstructed</p>	<p>The sytem is partially or fully blocked by debris, or design is such that it is vulnerable to blockage from runoff</p>	<p>Stormwater system shall be adequately sized and free flowing to divert runoff away from buildings and areas of use. Repair as needed, and correct any problems including incorrect grading or swales, need for fencing or other features to catch debris before entering the system, etc.</p>
<p>Walkways/Steps</p>	<p>Broken/Missing or non-compliant Hand Railing</p>	<p>A hand rail is missing, damaged, loose or otherwise defective; or does not meet local codes or requirements for accessibility</p>	<p>Handrals shall be intact, structurally sound, free of defects and shall be in compliance with state and/or local codes and requirements, Fair Housing Act, ADA and Section 504 requirements, as applicable.</p>

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Walkways/Steps	Cracks/Settlement/Heaving/Spalling/Other deterioration	Any defects other than very minor one with only cosmetic impact	Walkways and steps must be safe, sound, and free from trip hazards or other hazards. Repair or replace affected section or entire component to ensure safe, sound, hazard-free surfaces. If replaced, must meet State, Local and Federal requirements for accessibility unless it is infeasible for other reasons
Walkways/Steps	Damaged wood, composites or other materials	Any structural or surface damage, missing paint or sealant, cracking, splitting etc. which creates a hazard or impacts the use of the component	Walkways and steps must be in sound condition and good repair. Repair or replace with like materials or suitable, durable substitute.
Building Exterior			
Health, Safety and Life Threatening Conditions	Address all above as applicable		
Graffiti	Graffiti	Any graffiti on any exposed surface.	If graffiti is present, remove or cover/paint to match or blend with surrounding area.
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; or that has visible damage to any of those components	Doors and door structure must be intact, in good condition, and operable as designed. Replace damaged component with like materials, or replace entire door assembly.

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Doors	Damaged Hardware/Locks	Any door that does not function as it should or cannot be locked easily and securely because of damage to the door's hardware	Doors must function smoothly and easily. Lever handles are preferable, and shall be installed when replacing doors or hardware. Replacement components shall be appropriate to the type of door (exterior, interior, security needs, etc.).
Doors	Damaged surfaces	Any door that has a hole or holes, warped or deteriorated surfaces, peeling/cracking/no paint or rust that affects the integrity or appearance of the door surface, or broken/missing glass	Door surfaces and panels shall be intact, in good repair, and free from damage or defects. Replace door or repair and/or refinish to like-new condition
Doors	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	Screen or storm doors must be free of damage, must operate smoothly, and must have intact glass and screens that are free of rust, holes or tears. Repair or replace components or doors as indicated.
Doors	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	Caulking, seals, and weatherstripping shall be intact, in good condition, and shall meet the intended purpose. Replace as needed with materials designed for 10 year lifespan

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Doors	Missing Door	Any exterior door that is missing	If door is not present, install new door or entire door assembly, with hardware. If feasible, ensure that new door meets accessibility requirements (minimum 32" clear opening, lever handles, 1/2" maximum threshold).
Doors	Visibly Missing Components	Any component is not present, including hardware, handles, windows or screens, panels, trim, etc.	Doors must be complete, with all components as designed. Repair or replace as needed.
Foundations	Cracks/gaps/movement	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	Foundation walls must be intact, reasonably level and plumb, and must support the structure as designed. Inspect and address site grading, structural integrity of foundation. Shore up as needed with structural supports and seal all cracks or gaps with appropriate materials. Architect, engineer or local code official shall certify integrity of walls.
Foundations	Spalling/Exposed Rebar	Significant spalled areas affecting foundation wall or any exposed reinforcing material--rebar or other	Concrete must have structural integrity and be free of significant spalling or deterioration; and must not have exposed rebar. Repair or replace affected areas.
Lighting	Broken Fixtures/Bulbs	Broken lighting fixtures or bulbs	Exterior lighting must be present and adequate for safety and security. Fixtures must be intact, operable as designed, and in good condition.

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Roofs	General Roof Condition	Limited useful life.	All roofing shall be inspected, and an estimate of useful life and replacement plan shall be included in the Capital Needs Assessment and Scope of Work. Replace if less than 5 years.
Roofs	Damaged Soffits/Fascia	Soffits or fascia that should be there are missing or so damaged that water penetration is visibly possible	Replace all or replace missing or damaged components with like materials and finishes
Roofs	Damaged Vents	Vents are missing or so visibly damaged that further roof damage is possible	Replace missing or damaged components with like materials and finishes
Roofs	Damaged/Clogged Drains	The drain is damaged or partially clogged with debris or the drain no longer functions	Roof drain and gutter system shall be in good repair and effective in directing water away from the building and foundation. Repair or replace as necessary.
Roofs	Damaged/Torn Membrane/Missing Ballast	Balast has shifted and no longer functions as it should or there is damage to the roof membrane that may result in water penetration	Flat roofing shall be intact, in good repair, and free from damage, defects, or evidence of being near its useful life. Replace as needed.
Roofs	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	Roof drain and gutter system shall be in good repair and effective in directing water away from the building and foundation. Repair or replace
Roofs	Missing/Damaged Shingles	Roofing shingles are missing or damaged enough to create a risk of water penetration	Shingle roofing shall be in good repair, with no missing or damaged shingles or components. Replace roofing as indicated, with minimum 30 year 3-tab or architectural (50 year recommended).

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Roofs	Ponding	Evidence of standing water on roof, causing potential or visible damage to roof surface or underlying materials	Inspect and correct cause of standing water, including any structural settling or deflection; replace roof surface and underlying materials
Walls	Cracks/Gaps	Any crack or gap that presents a possible sign of structural problem or opportunity for water penetration	Inspect and correct structural problems; repair or replace wall components to correct damage, finish to match
Walls	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	Remove chimney if not required. Replace to code if needed.
Walls	Missing/Damaged Caulking/Mortar	Any exterior wall caulking or mortar deterioration that presents a risk of water penetration or risk of structural damage	Caulking or mortar shall be intact with no cracking or other significant deterioration, and shall function as designed. Remove and replace affected caulking or mortar with like colors
Walls	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	Wall surfaces shall be provide an unbroken barrier from external elements. Repair or replace affected wall cladding with like materials and colors, or replace all.
Walls	Stained/Peeling/Needs Paint	Any exterior paint is peeling or paint is missing and siding surface is exposed thereby exposing siding to water penetration and deterioration	Exterior wall finish shall provide a barrier to exposure from water penetration. Repair any damaged siding, prime and paint two coats to match.

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Windows	Broken/Missing/Cracked Panes	Any missing panes of glass or cracked panes of glass	Windows shall be intact and weathertight. Reglaze or replace affected window(s). Replacement shall be with energy efficient units.
Windows	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	Window components shall be intact and undamaged. Repair or replace damaged components, prime and paint or cover with vinyl, aluminum or similar
Windows	Damaged/Missing Screens	Missing screens or screens with holes greater than 1 inch by 1 inch or tears greater than 2 inches in length	Windows shall have removable screens or storm windows with screens that are intact, operate smoothly as designed and are free of significant holes or tears.
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	Caulking, glazing and mechanical seals shall be intact and function as designed. Repair and replace as necessary, and repair or replace any damaged house components
Windows	Peeling/Needs Paint	Any exterior window paint is peeling or paint is missing and window frame surface is exposed thereby exposing window frame to water penetration and deterioration	Repair any damage, prime and paint two coats, or cover with metal or vinyl cladding
Building Systems			
Health, Safety and Life Threatening Conditions	Address all above as applicable		

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Domestic Water	Leaking Central Water Supply	Leaking water from water supply line is observed	Water supply is to be inspected, and shall be in good condition with no leaks or evidence of corrosion which is likely to lead to failure. Water pressure must be adequate for service to all units, fixtures and common areas. Replace any leaking, restricted or deteriorating pipes, valves, joints, unions, etc. with new.
Domestic Water	Missing Pressure Relief Valve	There is no pressure relief valve or pressure relief valve does not drain down to the floor	Hot water heater must have a functioning TPR valve with an outlet no more than 2" from the floor. Inspect all water heaters, and replace components as indicated.
Domestic Water	Rust/Corrosion on Heater Chimney	The water heater chimney shows evidence of flaking, discoloration, pitting, or crevices that may create holes that could allow toxic gases to leak from the chimney	Gas water heaters must have intact functioning vent system to completely exhaust combustion gases to the exterior of the building
Domestic Water	Plumbing - Leaking Faucet/Pipes	Any leaking pipes, faucets or fixtures	All plumbing shall be inspected, and leaking pipes, fixtures, valves, etc. included in scope of work for repair or replacement.
Domestic Water	Water Supply Inoperable	There is no running water in any area of the building where there should be	Water supply must provide adequate water pressure to all fixtures inside and on the exterior of the building. Inspect all fixtures and replace or repair pipes, valves or fixtures as necessary

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DWV/Sanitary	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	Inspection by qualified professional from local fixtures out to sewer main. Camera inspection recommended. Repair or replace as necessary.
DWV/Sanitary	Plumbing - Clogged Drains	Drain is completely or partially clogged or deteriorated	DWV system shall be inspected and any needed repairs or replacement included in the scope of work.
DWV/Sanitary	Missing Drain/Cleanout/Manhole Covers	A protective cover is missing	Repair and replace as needed
Hot Water Heater	Misaligned Chimney/Ventilation System	Any misalignment that may cause improper or dangerous venting of gases	Repair or replace vent/chimney as required, or install electric heater.
Hot Water Heater	Inoperable Unit/Components	Hot water from hot water taps is no warmer than room temperature indicating hot water heater is not functioning properly	Water heaters must be capable of providing adequate hot water to common elements and for domestic use by the expected household size. Inspection of all water heaters by a qualified professional and replacement if indicated.
Hot Water Heater	Leaking Valves/Tanks/Pipes	There is evidence of active water leaks from hot water heater or related components	Inspect water heater for leaks. Repair or replace if indicated.
Hot Water Heater	Pressure Relief Valve Missing	There is no pressure relief valve or pressure relief valve does not drain down to the floor	TPR valve must be present, and outlet shall terminate no more than 2" from the floor. Inspect and correct if needed.
Hot Water Heater	Rust/Corrosion	Significant formations of metal oxides, flaking, or discoloration--or a pit or crevice	Water heater must be in good condition, with no evidence of significant rust or corrosion. Replacement by licensed plumber.

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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	Electrical panel must be clear of obstructions and accessible according to state or local code. Remove obstacles or relocate panel by licensed electrician and require electrician to sign off on proper location of panel
Electrical	GFI - Inoperable	The GFI does not function	GFI outlets required for all 15 A and 20A bathroom receptacles, those that serve kitchen or wet bar countertop surfaces, storage or work areas (including garage and accessory buildings) and any outdoor receptacles. Applicable state or local code, when stricter, will take precedence. Install or replace as needed.
Electrical System	Burnt Breakers	Carbon residue, melted breakers or arcing scars are evident	Inspect panel and breakers by licensed electrician. Replace as indicated
Electrical System	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	Correct to stop leak, clean and repair affected areas. Relocate source of water away from electrical components if practical
Electrical System	Frayed Wiring	Any nicks, abrasion, or fraying of the insulation that exposes any conducting wire	Wiring must be intact and fully insulated with no bare or exposed wires. Inspection, and replacement if indicated by licensed electrician

KHRC Rehabilitation Standards - UPCS Inspectable Items

Electrical System	Missing Breakers/Fuses	Any open and/or exposed breaker port	Breaker ports must contain functional breakers or be covered. Correction by licensed electrician
Electrical System	Lighting fixture missing, damaged or inoperable	An outlet or switch is missing	Light fixtures or switched outlets must be present in living areas. Fixtures must be in safe, operable condition with bulbs which provide appropriate illumination for the location, and no broken components. Repair or replace fixtures, replace bulbs with energy efficient ones.
Elevators	Not Operable	The elevator does not function at all or the elevator doors open when the cab is not there	If present, elevators must function as designed. Inspection and current certificates shall be obtained per state and local codes.
Emergency Power	Auxiliary Lighting Inoperable (if applicable)	Auxiliary lighting does not function	If present or required, emergency lighting and power must function as designed. Correction by licensed electrician
HVAC	General	Energy Efficiency	Replacement HVAC units must be energy efficient. For gas furnaces, a minimum AFUE rating of >92% is required. For AC units at least 14 SEER is required, and air source heat pumps shall have a minimum HSPF of 8.5 . Higher efficiency units are recommended.

KHRC Rehabilitation Standards - UPCS Inspectable Items

HVAC	Boiler/Pump Leaks	Evidence of water or steam leaking in piping or pump packing	If system is steam or hot water, boiler system must be inspected by a qualified professional. Repair or replace as needed.
HVAC	HVAC - Inoperable	HVAC does not function as designed. It does not provide the heating and cooling it should. The system does not respond when the controls are engaged	HVAC system shall be functional, and provide heating and cooling appropriate to the unit and climate zone. All controls shall operate, and HVAC components shall respond as designed. All HVAC units shall be inspected and addressed in the capital needs assessment and/or scope of work.
HVAC	Fuel Supply Leaks	Evidence of any amount of fuel leaking from the supply tank or piping	Inspection by certified HVAC professional. Repair or replace as indicated
HVAC	General Rust/Corrosion	Significant formations of metal oxides, significant flaking, discoloration, or the development of a noticable pit or crevice	Inspection by certified HVAC professional. Repair or replace as indicated
HVAC	HVAC - Noisy/Vibrating/Leaking	HVAC system shows signs of abnormal vibrations, other noise, or leaks when engaged	All HVAC components are to be inspected and tested, and repaired or replaced to operate as designed.
HVAC	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	Inspection by certified HVAC professional. Repair or replace as indicated
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable	The roof exhaust fan unit does not function	Inspect and repair or replace as indicated

KHRC Rehabilitation Standards - UPCS Inspectable Items

Common Areas and Living Units			
Health, Safety and Life Threatening Conditions	Address all above as applicable		
Laundry	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	Dryer vent must be present, intact, clear of lint, and function as designed to exhaust dryer to outside. Replace as necessary.
Kitchen	Cabinets - Missing/Damaged	Any portion of cabinet, doors, or shelves are missing or the laminate is separating	Repair or replace with like materials and finishes
Kitchen	Plumbing - Clogged Drains	Drain is substantially or completely clogged or has suffered extensive deterioration	Clean out drain, repair or replace as needed
Kitchen	Dishwasher/Garbage Disposal - Inoperable	The dishwasher or garbage disposal does not operate as it should	Dishwasher and garbage disposal shall be free of visible corrosion or damage, and shall function as designed. Inspect, test and replace as indicated.
Kitchen	Countertops - Missing/Damaged	Any portion of the countertop working surface is missing, deteriorated, or damaged below the laminate ---not a sanitary surface to prepare food	Countertops are to be intact and free of deterioration, cracking, separation of laminate or other damage. Replace if damaged.
Kitchen	Range Hood /Exhaust Fans -	Inoperable or noisy fan, missing or damaged screen, accumulation of grease or dirt	Range hoods or fans, if present, shall be in good condition, free of damage, rust or corrosion, and operate as designed. Repair or replace as needed

KHRC Rehabilitation Standards - UPCS Inspectable Items

Kitchen	Range/Stove - Missing/Damaged/Inoperable	One or more burners, oven or other component are not functioning as designed, or there is visible damage or rust, or missing or broken controls	Appliances shall be new or near-new condition, or shall be replaced in the scope of work. Appliances shall function as designed with no visible damage or deterioration. Replacement appliances shall be Energy Star certified.
Kitchen	Refrigerator - Damaged/Inoperable	The refrigerator has accumulation of ice or the seals around the doors are deteriorated or is damaged in any way which impacts its performance or appearance	Appliances shall be new or near-new condition, or shall be replaced in the scope of work. Appliances shall function as designed with no visible damage or deterioration. Replacement appliances shall be Energy Star certified.
Kitchen	Plumbing - Leaking Faucet/Pipes	Any leaking pipes, faucets or fixtures	Pipes and fixtures shall be free of leaks or conditions (corrosion, mineral buildup at joints, etc.) indicating potential failure. Repair or replacement as needed
Kitchen	Sink - Damaged/Missing	Any cracks in sink or extensive discoloration over any portion of the sink surface or sink is missing	Sink shall be present, and in good condition with no significant visible damage, staining or corrosion, and shall function as intended.
Bathroom	Restroom Cabinet - Damaged/Missing	Damaged or missing shelves, vanity top, drawers, missing or peeling paint or veneer, evidence of water damage, or doors that are not functioning as intended	Cabinets shall be sound and complete, with no visible damage or missing components, and shall function as intended

KHRC Rehabilitation Standards - UPCS Inspectable Items

Bathroom	Shower/Tub - Damaged/Missing	Any cracks in tub or shower through which water can pass or extensive discoloration of tub or shower surface or tub or shower is missing	Tub or shower shall be present and in good condition with no significant visible damage other than minor scratching, scuffing or small areas of discoloration. Replace damaged or missing fixtures.
Bathroom	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	Each toilet shall be inspected and tested for proper operation. Toilet shall be present, in undamaged condition, and shall operate as designed. Toilets that are damaged or inoperable, or that are designed to require more than 1.6 gallons per flush shall be replaced.
Bathroom	Lavatory Sink - Damaged/Missing	Sink has extensive discoloration or cracks in the basin or the sink or associated hardware have failed or are missing	Sink shall be present, and in good condition with no significant visible damage, and shall function as intended.
Bathroom	Ventilation/Exhaust System - Inoperable	exhaust fan is not functioning or window designed for ventilation does not open	Bathroom shall have an exhaust fan that operates as intended with no visible rust or deterioration, and shall operate quietly and without squeaking, rattling or other noises that would indicate potential failure. Replacement fans shall be Energy Star certified. If fan is not present, bathroom shall have a window that is easily operable for ventilation without unduly compromising privacy.

KHRC Rehabilitation Standards - UPCS Inspectable Items

Call for Aid	Call for Aid - Inoperable	The system does not function as it should	If present or required, must function as designed. Repair or replace, or remove if not required.
Stairs/Ramps	Broken/Damaged/Missing Steps	A step is missing or broken	Steps must be in good repair, free of trip or other hazards, and code compliant for rise and run.
Stairs	Broken/Missing Hand Railing	The hand rail is missing, damaged, loose or otherwise unusable	Hand rails must be intact, secure, free of damage or deterioration, and code compliant for location.
Stairs	Baluster/Side Railings Damaged	Any damaged, missing or incorrectly spaced balusters or side rails that limit the safe use of an area	Inspect and measure height, spacing of spindles, etc. for code compliance. Repair or replace as indicated.
Ramp	Pedestrian/Wheelchair Ramp	A walkway or ramp is damaged and cannot be safely used by people on foot, in wheelchair, or using walkers; or shows evidence of continuing deterioration	Walkways and ramps shall be intact, free of deterioration or obstructions, and when repaired or replaced shall meet Fair Housing accessibility standard
Ceiling	Ceiling - Holes/Missing Tiles/Panels/Cracks	Any holes in ceiling, missing tiles or cracks	Ceiling shall be intact surface with minimal deterioration and good finish. Repair or replace and paint as needed.
Ceiling	Ceiling - Peeling/Needs Paint	Ceiling has peeling paint or is missing paint	Paint is intact with no peeling, crazing, cracking or missing portions. Remove loose paint and touch up, or prime and repaint entire surface

KHRC Rehabilitation Standards - UPCS Inspectable Items

Ceiling	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	Ceiling is free of any evidence of water or moisture damage. Inspect, identify sources of moisture and correct. Replace damaged section, prime with stain hiding product and repaint, or cover with appropriate surface material.
Doors	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	Doors and frames must be complete and free of damage, with all components as designed. Repair or replace as necessary
Doors	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	Inspect all doors. Door hardware must function as designed, must open smoothly and easily, and must be easy to close, latch and lock. Repair or replace as indicated.
Doors	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	Door surfaces and panels must be intact and undamaged, with no rust, holes, broken glass or deteriorating paint. Repair and replace as indicated
Doors	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	Exterior doors must be weathertight, and must operate smoothly and easily. Repair or replace seals, weatherstripping, caulking etc. as necessary.

KHRC Rehabilitation Standards - UPCS Inspectable Items

Doors	Doors - Missing Door	Any door that is missing that is required for the functional use of the space	Doors must be present where required for functional use of space, including bedrooms, bathrooms, closets, and other spaces where privacy or security are needed. Replace to match closely other existing doors.
Floors	Floors - Bulging/Buckling	Any flooring that is bulging, buckling or sagging or a problem with alignment between flooring types	Floors must be structurally sound, level, and free of trip hazards including abrupt or non-transitioning changes in elevation. Repair substructure and floor, replace floor covering if indicated
Floors	Floors - Floor Covering Damaged	Floor covering has stains, surface burns, shallow cuts, small holes, tears, loose areas or exposed seams.	Floor coverings are to be intact, in good condition, with minimal to no staining, fraying, cuts or tears or other damage. Replace with like materials and finishes
Floors	Floors - Missing Floor/Tiles	Floor tile or other flooring components are missing	Floor coverings including tile, laminates or similar shall cover the entire floor area, except for area rugs used for appearance and comfort. Repair with like materials, or replace entirely.
Floors	Floors - Peeling/Needs Paint	Any painted flooring that has peeling or missing paint	Floor finish shall be complete, intact, and undamaged. Scrape, sand and repaint; or cover with suitable flooring material

KHRC Rehabilitation Standards - UPCS Inspectable Items

Floors	Floors - Rot/Deteriorated Subfloor	Any rotted or deteriorated subflooring greater than 6 inches by 6 inches	Floor and subfloor shall be structurally sound. Repair any damaged substructure and subfloor, and replace floor covering if indicated
Floors	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	Floors shall be free of staining, damage, mold or mildew from moisture. Locate and eliminate water source, repair and refinish or install new floor material or cover
General	Mailbox - Missing/Damaged	The U.S Postal Service mailbox cannot be locked or is missing	Mailbox meeting USPS specs must be provided for each unit in an accessible location, and shall be lockable if in a location regularly accessed by others.
Walls	Walls - Bulging/Buckling	Bulging, buckling or sagging walls or a lack of horizontal alignment	Walls shall be sound, plumb, and free of bulging or buckling. Correct structural causes. Repair or tear out wall components and replace as needed to obtain smooth walls that are plumb and square with adjacent surfaces.
Walls	Walls - Damaged	Any hole in wall including multiple nail holes	Walls shall be generally free of holes. Patch or spackle, prime and paint; or cover with alternative wall treatment (e.g., wallpaper, paneling)
Walls	Walls - Damaged/Deteriorated Trim	Wall trim is damaged	Wall trim is to be intact, secured as designed, and undamaged. Repair or replace as needed.
Walls	Walls - Peeling/Needs Paint	Interior wall paint is damaged, peeling or missing	Patch, prime and paint

KHRC Rehabilitation Standards - UPCS Inspectable Items

Walls	Walls - Water Stains/Water Damage/Mold/Mildew	Evidence of a leak, mold or mildew--such as a common area	Surfaces are to be free of staining or evidence of mold, mildew or moisture. Locate and repair sources of moisture, patch, prime and repaint surfaces
Windows	Windows - Cracked/Broken/Missing Panes	Any missing panes of glass or cracked panes of glass	Windows shall be intact and weathertight. Reglaze or replace window(s). Replacement with energy efficient units
Windows	Windows - Damaged Window Sill	The sill is damaged or deteriorated, including deep gouges, cracked, split or rotted wood, missing or peeling paint, separation from the framing or surrounding trim	Sills shall be intact and solid with no visible damage or misalignment. Repair as needed.
Windows	Windows - Inoperable/Not Lockable	Any window that is not functioning or cannot be secured because lock is broken	Windows shall be secure, shall operate as designed without undue effort, and shall be lockable from the inside.
Windows	Windows - Missing/Deteriorated Caulking/Seals/Glazing Compound	There are missing or deteriorated caulk or seals	Window seals, glazing and weatherstripping shall be in good condition and function as designed. Repair as needed.
Windows	Windows - Peeling/Needs Paint	Interior window paint is peeling or missing	Window paint shall be intact and shall be determined free of lead hazards. Repair as needed, clean, prime and repaint following LBP protocols.

KHRC Rehabilitation Standards - UPCS Inspectable Items

Trash Collection Areas - Interior	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 componenets--have failed	Trash collection chutes or devices must operate as designed for safe and sanitary disposal of garbage.
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Housing Trust Fund (HTF) FAQ
Appendices:
Uniform Physical Condition
Standards for Multifamily and
Single Family Housing
Rehabilitation

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Appendix A: Uniform Physical Condition Standards for Multifamily Housing Rehabilitation

**Uniform Physical Condition Standards for Multifamily Housing Rehabilitation –
Requirements for Site**

Inspectable Item	Observable Deficiency
Fencing and Gates	Damaged/Falling/Leaning
	Holes
	Missing Sections
Grounds	Erosion/Rutting Areas
	Overgrown/Penetrating Vegetation
	Ponding/Site Drainage
Health & Safety	Air Quality - Sewer Odor Detected
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Flammable Materials - Improperly Stored
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
Mailboxes/Project Signs	Mailbox Missing/Damaged
	Signs Damaged
Parking Lots/Driveways/Roads	Cracks
	Ponding
	Potholes/Loose Material
	Settlement/Heaving
Play Areas and Equipment	Damaged/Broken Equipment
	Deteriorated Play Area Surface
Refuse Disposal	Broken/Damaged Enclosure-Inadequate Outside Storage Space
Retaining Walls	Damaged/Falling/Leaning
Storm Drainage	Damaged/Obstructed
Walkways/Steps	Broken/Missing Hand Railing
	Cracks/Settlement/Heaving
	Spalling/Exposed rebar

**Uniform Physical Condition Standards for Multifamily Housing Rehabilitation –
Requirements for Building Exterior**

Inspectable Item	Observable Deficiency
Doors	Damaged Frames/Threshold/Lintels/Trim
	Damaged Hardware/Locks
	Damaged Surface (Holes/Paint/Rusting/Glass)
	Damaged/Missing Screen/Storm/Security Door
	Deteriorated/Missing Caulking/Seals
	Missing Door
Fire Escapes	Blocked Egress/Ladders
	Visibly Missing Components
Foundations	Cracks/Gaps
	Spalling/Exposed Rebar
Health and Safety	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable
	Emergency Fire Exits - Missing Exit Signs
	Flammable/Combustible Materials - Improperly Stored
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
Infestation - Rats/Mice/Vermin	
Lighting	Broken Fixtures/Bulbs
Roofs	Damaged Soffits/Fascia
	Damaged Vents
	Damaged/Clogged Drains
	Damaged/Torn Membrane/Missing Ballast
	Missing/Damaged Components from Downspout/Gutter
	Missing/Damaged Shingles
	Ponding
Walls	Cracks/Gaps
	Damaged Chimneys
	Missing/Damaged Caulking/Mortar
	Missing Pieces/Holes/Spalling
	Stained/Peeling/Needs Paint
Windows	Broken/Missing/Cracked Panes
	Damaged Sills/Frames/Lintels/Trim
	Damaged/Missing Screens
	Missing/Deteriorated Caulking/Seals/Glazing Compound
	Peeling/Needs Paint
	Security Bars Prevent Egress

**Uniform Physical Condition Standards for Multifamily Housing Rehabilitation –
Requirements for Building Systems**

Inspectable Item	Observable Deficiency
Domestic Water	Leaking Central Water Supply
	Missing Pressure Relief Valve
	Rust/Corrosion on Heater Chimney
	Water Supply Inoperable
Electrical System	Blocked Access/Improper Storage
	Burnt Breakers
	Evidence of Leaks/Corrosion
	Frayed Wiring
	Missing Breakers/Fuses
	Missing Outlet Covers
Elevators	Not Operable
Emergency Power	Auxiliary Lighting Inoperable (if applicable)
Fire Protection	Missing Sprinkler Head
	Missing/Damaged/Expired Extinguishers
Health & Safety	Air Quality - Mold and/or Mildew Observed
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Air Quality - Sewer Odor Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Elevator - Tripping
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable
	Emergency Fire Exits - Missing Exit Signs
	Flammable Materials - Improperly Stored
	Garbage and Debris - Indoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards – Tripping Hazards
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
	HVAC
Fuel Supply Leaks	
General Rust/Corrosion	
Misaligned Chimney/Ventilation System	
Roof Exhaust System	Roof Exhaust Fan(s) Inoperable
Sanitary System	Broken/Leaking/Clogged Pipes or Drains
	Missing Drain/Cleanout/Manhole Covers

**Uniform Physical Condition Standards for Multifamily Housing Rehabilitation –
Requirements for Common Areas**

Inspectable Item Location	Observable Deficiency
Basement/Garage/Carport	Baluster/Side Railings - Damaged
Closet/Utility/Mechanical	Cabinets - Missing/Damaged
Community Room	Call for Aid - Inoperable
Halls/Corridors/Stairs	Ceiling - Holes/Missing Tiles/Panels/Cracks
Kitchen	Ceiling - Peeling/Needs Paint
Laundry Room	Ceiling - Water Stains/Water Damage/Mold/Mildew
Lobby	Countertops - Missing/Damaged
Office	Dishwasher/Garbage Disposal - Inoperable
Other Community Spaces	Doors - Damaged Frames/Threshold/Lintels/Trim
Patio/Porch/Balcony	Doors - Damaged Hardware/Locks
Restrooms	Doors - Damaged Surface (Holes/Paint/Rust/Glass)
Storage	Doors - Damaged/Missing Screen/Storm/Security Door
	Doors - Deteriorated/Missing Seals (Entry Only)
	Doors - Missing Door
	Dryer Vent -Missing/Damaged/Inoperable
	Electrical - Blocked Access to Electrical Panel
	Electrical - Burnt Breakers
	Electrical - Evidence of Leaks/Corrosion
	Electrical - Frayed Wiring
	Electrical - Missing Breakers
	Electrical - Missing Covers
	Floors - Bulging/Buckling
	Floors - Floor Covering Damaged
	Floors - Missing Floor/Tiles
	Floors - Peeling/Needs Paint
	Floors - Rot/Deteriorated Subfloor
	Floors - Water Stains/Water Damage/Mold/Mildew
	GFI - Inoperable
	Graffiti
	HVAC - Convection/Radiant Heat System Covers Missing/Damaged
	HVAC - General Rust/Corrosion
	HVAC - Inoperable
	HVAC - Misaligned Chimney/Ventilation System
	HVAC - Noisy/Vibrating/Leaking
	Lavatory Sink - Damaged/Missing
	Lighting - Missing/Damaged/Inoperable Fixture
	Mailbox - Missing/Damaged
	Outlets/Switches/Cover Plates - Missing/Broken
	Pedestrian/Wheelchair Ramp
	Plumbing - Clogged Drains
	Plumbing - Leaking Faucet/Pipes
	Range Hood /Exhaust Fans - Excessive Grease/Inoperable
	Range/Stove - Missing/Damaged/Inoperable
	Refrigerator - Damaged/Inoperable
	Restroom Cabinet - Damaged/Missing

Inspectable Item Location	Observable Deficiency
	Shower/Tub - Damaged/Missing
	Sink - Missing/Damaged
	Smoke Detector - Missing/Inoperable
	Stairs - Broken/Damaged/Missing Steps
	Stairs - Broken/Missing Hand Railing
	Ventilation/Exhaust System - Inoperable
	Walls - Bulging/Buckling
	Walls - Damaged
	Walls - Damaged/Deteriorated Trim
	Walls - Peeling/Needs Paint
	Walls - Water Stains/Water Damage/Mold/Mildew
	Water Closet/Toilet - Damaged/Clogged/Missing
	Windows - Cracked/Broken/Missing Panes
	Windows - Damaged Window Sill
	Windows - Inoperable/Not Lockable
	Windows - Missing/Deteriorated Caulking/Seals/Glazing Compound
	Windows - Peeling/Needs Paint
	Windows - Security Bars Prevent Egress
Health & Safety	Air Quality - Mold and/or Mildew Observed
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Air Quality - Sewer Odor Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable
	Emergency Fire Exits - Missing Exit Signs
	Flammable/Combustible Materials - Improperly Stored
	Garbage and Debris - Indoors
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
Pools and Related Structures	Fencing - Damaged/Not Intact
Trash Collection Areas	Chutes - Damaged/Missing Components

**Uniform Physical Condition Standards for Multifamily Housing Rehabilitation –
Requirements for Unit**

Inspectable Item	Observable Deficiency
Bathroom	Bathroom Cabinets - Damaged/Missing
	Lavatory Sink - Damaged/Missing
	Plumbing - Clogged Drains, Faucets
	Plumbing - Leaking Faucet/Pipes
	Shower/Tub - Damaged/Missing
	Ventilation/Exhaust System – Absent/Inoperable
	Water Closet/Toilet - Damaged/Clogged/Missing
Call-for-Aid (if applicable)	Inoperable
Ceiling	Bulging/Buckling/Leaking
	Holes/Missing Tiles/Panels/Cracks
	Peeling/Needs Paint
	Water Stains/Water Damage/Mold/Mildew
Doors	Damaged Frames/Threshold/Lintels/Trim
	Damaged Hardware/Locks
	Damaged/Missing Screen/Storm/Security Door
	Damaged Surface - Holes/Paint/Rusting/Glass/Rotting
	Deteriorated/Missing Seals (Entry Only)
	Missing Door
Electrical System	Blocked Access to Electrical Panel
	Burnt Breakers
	Evidence of Leaks/Corrosion
	Frayed Wiring
	GFI - Inoperable
	Missing Breakers/Fuses
	Missing Covers
Floors	Bulging/Buckling
	Floor Covering Damage
	Missing Flooring Tiles
	Peeling/Needs Paint
	Rot/Deteriorated Subfloor
	Water Stains/Water Damage/Mold/Mildew
Health & Safety	Air Quality - Mold and/or Mildew Observed
	Air Quality - Sewer Odor Detected
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Emergency Fire Exits - Emergency/Fire Exits Blocked/Unusable
	Emergency Fire Exits - Missing Exit Signs
	Flammable Materials - Improperly Stored
	Garbage and Debris - Indoors
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges

Inspectable Item	Observable Deficiency
	Hazards - Tripping
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
Hot Water Heater	Misaligned Chimney/Ventilation System
	Inoperable Unit/Components
	Leaking Valves/Tanks/Pipes
	Pressure Relief Valve Missing
	Rust/Corrosion
HVAC System	Convection/Radiant Heat System Covers Missing/Damaged
	Inoperable
	Misaligned Chimney/Ventilation System
	Noisy/Vibrating/Leaking
	Rust/Corrosion
Kitchen	Cabinets - Missing/Damaged
	Countertops - Missing/Damaged
	Dishwasher/Garbage Disposal - Inoperable
	Plumbing - Clogged Drains
	Plumbing - Leaking Faucet/Pipes
	Range Hood/Exhaust Fans - Excessive Grease/Inoperable
	Range/Stove - Missing/Damaged/Inoperable
	Refrigerator-Missing/Damaged/Inoperable
	Sink - Damaged/Missing
Laundry Area (Room)	Dryer Vent - Missing/Damaged/Inoperable
Lighting	Missing/Inoperable Fixture
Outlets/Switches	Missing
	Missing/Broken Cover Plates
Patio/Porch/Balcony	Baluster/Side Railings Damaged
Smoke Detector	Missing/Inoperable
Stairs	Broken/Damaged/Missing Steps
	Broken/Missing Hand Railing
Walls	Bulging/Buckling
	Damaged
	Damaged/Deteriorated Trim
	Peeling/Needs Paint
	Water Stains/Water Damage/Mold/Mildew
Windows	Cracked/Broken/Missing Panes
	Damaged Window Sill
	Missing/Deteriorated Caulking/Seals/Glazing Compound
	Inoperable/Not Lockable
	Peeling/Needs Paint
	Security Bars Prevent Egress

**Uniform Physical Condition Standards for Single Family Housing Rehabilitation –
Requirements for Site**

Inspectable Item	Observable Deficiency
Fencing and Gates	Damaged/Falling/Leaning
	Holes
	Missing Sections
Grounds	Erosion/Rutting Areas
	Overgrown/Penetrating Vegetation
	Ponding/Site Drainage (affecting unit)
Health & Safety	Air Quality - Sewer Odor Detected
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Flammable Materials - Improperly Stored
	Garbage and Debris - Outdoors
	Play Equipment – Broken or Damaged
	Hazards – Other (e.g., outbuildings)
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
Mailboxes/Project Signs	Mailbox Missing/Damaged
	Signs Damaged
Driveways	Cracks
	Potholes/Loose Material
	Settlement/Heaving
Retaining Walls	Damaged/Falling/Leaning
Storm Drainage	Damaged/Obstructed
Walkways/Steps	Broken/Missing Hand Railing
	Cracks/Settlement/Heaving
	Spalling

Appendix B: Uniform Physical Condition Standards for Single Family Housing Rehabilitation

Requirements for Building Exterior

Inspectable Item	Observable Deficiency
Doors	Damaged Frames/Threshold/Lintels/Trim
	Damaged Hardware/Locks
	Damaged Surface (Holes/Paint/Rusting/Glass)
	Damaged/Missing Screen/Storm/Security Door
	Deteriorated/Missing Caulking/Seals
	Missing Door
Foundations	Cracks/Gaps
	Spalling/Exposed Rebar
Health and Safety	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Flammable/Combustible Materials - Improperly Stored
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
Infestation - Rats/Mice/Vermin	
Lighting	Broken Fixtures/Bulbs
Roofs	Damaged Soffits/Fascia
	Damaged Vents
	Damaged/Clogged Drains
	Damaged/Torn Membrane/Missing Ballast
	Missing/Damaged Components from Downspout/Gutter
	Missing/Damaged Shingles
	Ponding
Walls	Cracks/Gaps
	Damaged Chimneys
	Missing/Damaged Caulking/Mortar
	Missing Pieces/Holes/Spalling
	Stained/Peeling/Needs Paint
Windows	Broken/Missing/Cracked Panes
	Damaged Sills/Frames/Lintels/Trim
	Damaged/Missing Screens
	Missing/Deteriorated Caulking/Seals/Glazing Compound
	Peeling/Needs Paint
	Security Bars Prevent Egress

Requirements for Unit

Inspectable Item	Observable Deficiency
Bathroom	Bathroom Cabinets - Damaged/Missing
	Lavatory Sink - Damaged/Missing
	Plumbing - Clogged Drains
	Plumbing - Leaking Faucet/Pipes
	Shower/Tub - Damaged/Missing
	Ventilation/Exhaust System – Inoperable (if applicable)
	Water Closet/Toilet - Damaged/Clogged/Missing
Ceiling	Bulging/Buckling
	Holes/Missing Tiles/Panels/Cracks
	Peeling/Needs Paint
	Water Stains/Water Damage/Mold/Mildew
Doors	Damaged Frames/Threshold/Lintels/Trim
	Damaged Hardware/Locks
	Damaged/Missing Screen/Storm/Security Door
	Damaged Surface - Holes/Paint/Rusting/Glass
	Deteriorated/Missing Seals (Entry Only)
	Missing Door
Electrical System	Blocked Access to Electrical Panel
	Burnt Breakers
	Evidence of Leaks/Corrosion
	Frayed Wiring
	GFI - Inoperable
	Missing Breakers/Fuses
	Missing Covers
Floors	Bulging/Buckling
	Floor Covering Damage
	Missing Flooring Tiles
	Peeling/Needs Paint
	Rot/Deteriorated Subfloor
	Water Stains/Water Damage/Mold/Mildew
Health & Safety	Air Quality - Mold and/or Mildew Observed
	Air Quality - Sewer Odor Detected
	Air Quality - Propane/Natural Gas/Methane Gas Detected
	Electrical Hazards - Exposed Wires/Open Panels
	Electrical Hazards - Water Leaks on/near Electrical Equipment
	Flammable Materials - Improperly Stored
	Garbage and Debris - Indoors
	Garbage and Debris - Outdoors
	Hazards - Other
	Hazards - Sharp Edges
	Hazards - Tripping
	Infestation - Insects
	Infestation - Rats/Mice/Vermin
Hot Water Heater	Inoperable Unit/Components

Inspectable Item	Observable Deficiency
	Leaking Valves/Tanks/Pipes
	Pressure Relief Valve Missing
	Rust/Corrosion
HVAC System	Inoperable
	Misaligned Chimney/Ventilation System
	Noisy/Vibrating/Leaking
	Rust/Corrosion
Kitchen	Cabinets - Missing/Damaged
	Countertops - Missing/Damaged
	Dishwasher/Garbage Disposal – Leaking/Inoperable
	Plumbing - Clogged Drains
	Plumbing - Leaking Faucet/Pipes
	Range Hood/Exhaust Fans - Excessive Grease/Inoperable
	Range/Stove - Missing/Damaged/Inoperable
	Refrigerator-Missing/Damaged/Inoperable
	Sink - Damaged/Missing
Laundry Area (Room)	Dryer Vent - Missing/Damaged/Inoperable
Lighting	Missing/Inoperable Fixture
Outlets/Switches	Missing
	Missing/Broken Cover Plates
Patio/Porch/Balcony	Baluster/Side Railings Damaged
Smoke Detector	Missing/Inoperable
Stairs	Broken/Damaged/Missing Steps
	Broken/Missing Hand Railing
Walls	Bulging/Buckling
	Damaged
	Damaged/Deteriorated Trim
	Peeling/Needs Paint
	Water Stains/Water Damage/Mold/Mildew
Windows	Cracked/Broken/Missing Panes
	Damaged/Rotting Window Sill
	Missing/Deteriorated Caulking/Seals/Glazing Compound
	Inoperable/Not Lockable
	Peeling/Needs Paint
	Security Bars Prevent Egress

HOUSING REHABILITATION MATERIAL APPLICATION STANDARDS

IMPORTANT

Please read material application & performance standards carefully.

Contractor will obtain and pay for all necessary licenses, permits and privileges required in his work, and perform all work in strict accordance with the laws and ordinances in force in the State of Kansas, and in the locality in which this work is to be performed. Contractor will investigate what Federal, State, or Municipal laws and requirements are applicable and comply with all in an approved manner.

Lead Safe Work Practices will be implemented on all homes built prior to 1978.

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP; THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

CARPENTRY SPECIFICATIONS

A. Concrete Work

1. The concrete mix shall be 3,000 pounds transit mix or with a 5 1/2 sack mix for both interior and exposed concrete.
2. No concrete shall be poured on frozen ground.
3. All concrete flat work must be over a 2" layer of gravel/sand on compacted earth and be reinforced properly.
4. All flat work concrete must be a minimum of 4" thick with 1/2" pre-molded asphalt or non-bituminous fiber-filled material expansion joints at entrance platforms, steps, intersections with driveways or walks, and in long runs at least every 50'.
5. Control joints must be provided at no more than 5' intervals for sidewalks and 20' intervals for floors, concrete drives, and parking slabs.
6. Footings must be below the freeze line, 8" thick, and reinforced properly with rebar.
7. Foundation walls must be 8" wide and reinforced properly with rebar.

CONTRACTOR MUST CALL FOR A SITE INSPECTION AFTER SITE IS READY FOR CONCRETE AND 24 HOURS PRIOR TO POURING. AFTER 24 HOURS HAS ELAPSED CONTRACTOR MAY PROCEED. NOTIFY THE PROJECT INSPECTOR.

B. Masonry Work

1. No masonry work shall be done when the temperature of the surrounding air is likely to cause freezing.
2. All joints must be completely filled with mortar.
3. All brick, stone, or block used should match, if possible, adjacent work. The owner(s) must approve samples before starting the work, unless the work is to be painted or covered.
4. Soft salmon type brick shall not be allowed.
5. Tuck-pointing shall only be done after the joints have been raked out to a minimum depth of 1/2" and wetted.
6. All damaged, loose, or salmon brick, in area to be rebuilt, must be removed until sound brickwork is encountered.
7. New brick patches must be toothed into and match in the existing work in site, joints, and bond.
8. Veneer brickwork must be tied to frame wall with galvanized wall ties on every third course, 32" on center, and shall conform to above specifications.

9. All new retaining walls over 24" high must have #4 steel dowels placed every 2' and be imbedded at least 6" into the footings.
10. Retaining wall footings shall be three times the thickness of the wall in width and 8" deep, containing three (3) #4 steel rebar.
11. All retaining walls over 24" high shall have weep holes at grade level at 8' intervals.
12. All block replacement foundation walls shall have a galvanized steel bed reinforcement (8" mesh) in 2nd course and 5th course of block. Concrete block or poured wall may be used for all foundation walls.

C. Grade

Shall mean backfill along foundation with topsoil and provide sufficient slope in finish grade to provide drainage away from house.

D. Framing Lumber

1. Must be No. 3 Southern Pine, SB, SPF, standard grade, or better.
2. Studs must be Stud Grade.
3. Allowable spans for floor, roof, and ceiling joists no greater than 24" centers.
4. Bearing partition stud walls may not be less than 2" x 4" studs with dimension perpendicular to the wall, 16" on center.
5. Floor joist spacing may be no more than 16" on center when 25/32" flooring is to be applied directly to the joist; or, 16" on center when any lesser thickness of finish flooring is to be laid over a sub-floor.
6. Gutting of structural members shall not be done without the approval of the Project Inspector.

E. Sub-Flooring

1. Plywood shall be Southern Yellow Pine (SYP), 1/2" minimum where 25/32" finished flooring is to be laid or 5/8" where resilient flooring is to be laid and joists are not over 16" on center.
2. Nail plywood sub-floor to joint at each bearing with No.8 cemented or galvanized, or No. 6 threaded nails spaced 6" on center along all edges, and 10" on center along intermediate members.
3. Install plywood with outer piles at right angles to the joists and staggered so that the end joists in adjacent panels bear on different joists.

4. Common boards used as sub-flooring shall not be over 11" wide or less than 3/4" thick when laid on joist spaced 10" on center, and shall be laid diagonally if hard wood flooring is laid.
5. Nail boards with No. 8 box nails or No. 6b threaded nails, as follows:
 - a. Two (2) nails in 3" boards.
 - b. Two (2) nails in 4" boards.
 - c. Three (3) nails in 6" boards.
 - d. Four (4) nails in 8" boards.
 - e. Five (5) nails in 12" boards.

F. Underlayment

1. Shall be 3/8" structural grade plywood or 1/4" underlayment.
2. Nail underlayment with cement coated, rosin coated, or ring shank nails placed on 4" centers on all edges and over the face of each piece.
3. Cement Board in high moisture area installed using Manufacturer Specifications

G. Finish Flooring

1. Strip Wood Flooring
 - a. Material must be softwood with 25/32" minimum thickness.
 - b. Shall be 3 1/4" maximum width.
 - c. Nails shall be as recommended by flooring manufacturer. Blind nail tongue and groove flooring, driving nail at an approximate angle of 50 degrees. Space nails every 10" to 12" on center.
2. Sheet Vinyl Flooring
 - a. Minimum 0.065" gauge overall thickness.
 - b. Shall be 0.025" gauge wear layer, 10' wide rolls.
 - c. The owner(s) shall be shown at least three (3) samples to select from a quality that will cost no more than \$20 per yard including installation.
 - d. Mastic shall be as recommended by flooring manufacturer. (No gluing only along the edges will be allowed).
 - e. All joints and cracks in base shall be filled, smoothed, and leveled.
 - f. Where irregular floor conditions exist, install underlayment to receive vinyl flooring.
 - g. Layout to minimize joints in vinyl flooring. Small strips or patching will not be allowed.
 - h. Owner(s) shall sign color sample.
3. Carpeting and Padding
 - a. The owner(s) will select from at least three (3) carpet samples.

- b. Based on a specified allowance, not to exceed more than \$20 per yard including installation.
- c. Owner(s) shall sign color sample.
- d. Where irregular floor conditions exist, install underlayment to receive carpet.
- e. Carpet shall be stain and soil resistant treated, FHA approved, and installed in strict accordance with manufacturer's specifications.
- f. Padding shall be, FHA approved, and installed according to manufacturer's specifications.

**CARPET WILL NOT BE ALLOWED IN BATHROOMS, KITCHENS,
AND UTILITY ROOMS.**

H. Finish Lumber

- 1. Shall be free from tool marks and other objectionable defects.
- 2. Solid lumber and miscellaneous trim for interior finish shall be vinyl or solid stock white pine, if stained. Finger joints, allowed if painted.
- 3. All exterior solid lumber and trim shall be sealed against the weather. Exterior porches and all wood meeting the ground shall be treated lumber.
- 4. Porches shall have a top, intermediate, and bottom railing.

I. Exterior Doors

- 1. Doors:
 - a. Shall be new, wood flush, particle core, exterior grade, and standard entrance doors with window light. A pre-hung insulated steel door may also be used.
 - b. Shall conform to the thickness of the doorjamb and be hung on three (3) 3 1/2 x 3 1/2" butt hinges, flush mounted.
 - c. Shall have a minimum 10" x 10" glass window installed or peep hole (client to decide).
 - d. Replacement shall include weather stripping, installation of door sweeps, locksets, and hinges.
 - e. After installation, doors are to be neat in appearance and operate smoothly to insure an airtight seal.
 - f. Replacement doors are to be finished as per painting specifications.
- 2. Weather Stripping:
 - a. All existing weather-stripping (W/S) is to be removed prior to the installation.
 - b. W/S shall be installed on both sides and top of doorjamb and shall be Q-Ion (Vinyl clad foam) with aluminum back or equivalent.
 - c. The doorstop shall be caulked as needed to complete the airtight seal.
 - d. Adjust door as necessary to insure airtight seal with the W/S.
 - e. The installation is to be airtight, neat in appearance, without buckling or gaps, and installed in such a manner that it is considered permanent.

3. Sweeps:
 - a. Sweeps are to be a metal strip with a vinyl or neoprene insert installed according to the manufacturer's instructions.
 - b. Install on the inside of doors that open inward or on the exterior of doors that open outward, so as not to interfere with the smooth operation of the door.
 - c. Must be installed with mounting screws no further than two inches (2") from each end.
 - d. Bottom edge of the sweep is to touch the threshold for proper seal.

4. Locksets:
 - a. Locksets to be installed on exterior doors must be of a keyed type.
 - b. Install according to manufacturer's specifications.
 - c. Two (2) working keys are to be supplied to the client when the new lockset is installed.

5. Thresholds:
 - a. Shall saddle try type with door bottom.
 - b. Are to fit snugly between the jambs and fasten with screws, and form an airtight seal between door and threshold.

6. Garage Door
 - a. Must be a 25 gauge galvanized Door
 - b. Must be insulated

J. Storm Doors

1. Shall mean aluminum clad, solid core construction with baked-on finish, self-storing design to contain two glass panels and one, full-size screen panel. Similar in quality to the Cole Sewell "Solid Saver" Model 530.
2. Shall have closures and hardware including stop springs.
3. Adjust for proper tension and operation.
4. Shall have corner bracing for additional support.

K. Windows

1. Frames, sill, sash, trim, and hardware shall match existing work in design and dimension unless otherwise specified in the work write-up.
2. New windows shall be single hung double pane insulated vinyl, aluminum, or wood frame, equal to or better than Columbia Industries C-1600 with screens.

3. Positive locking devices ("cam action" sash locks) shall be provided on all windows, which are accessible from the exterior, and all existing interior finish hardware shall be made operative or replaced.
4. Finish per painting specifications.
5. Glass and Glazing (for glass replacement).
 - a. Windows shall be glazed or re-glazed, where required, with single strength clear grade B glass.
 - b. Window glazing shall be oil base and contain no asbestos or lead.
6. Putty shall consist of pure linseed oil, pure whiting, natural color, or standard commercial grade putty.
7. Prime all wood sash before the placing of putty.
8. Glass shall be bedded in putty and secured in place with glazier points and face puttied. All excess putty shall be removed and all glass left clean.

L. Storm Windows

1. Are to be standard aluminum frames, self-storing, with removable sash and screen section similar in quality to the Columbia Series 400.
2. Adjust for proper tension and operation.
3. Shall have corner bracing for additional support.

M. Stucco

1. Mortar for all applications shall consist of one (1) part Portland cement to not less than three (3) or more than five (5) parts of damp loose aggregate by volume. Hydrate lime may be used but shall not exceed 10 percent by weight or more than 25 percent by volume of the cement used.
2. The temperature of the surrounding air shall not be less than 40 degrees F. during application and for at least 48 hours thereafter.
3. Surfaces to receive stucco shall be covered with 3.40 pounds per square yard metal lath lapped at end and sides a minimum of 1", and nailed 10" on center vertically and 6" on center horizontally.
4. Apply a minimum of two (2) or three (3) coats. The final coat shall not be applied sooner than seven (7) days after the preceding coat. Before applying the final coat, the surface shall be dampened evenly to obtain uniform suction.
5. Apply two (2) coats on masonry to a minimum thickness of 5/8".
6. Apply three (3) coats over wood surfaces to a minimum thickness of 7/8".

7. Prior to stucco being painted, it shall be washed down with 5 percent muriatic acid solution and rinsed clean with clear water.
8. Patching of stucco, when called for in the Work Write-Up, shall include the removal of all loose material encountered until sound construction is reached, including the removal of rotted or deteriorated lath.

N. Plastering

1. Gypsum plaster materials shall be standard commercial brands.
2. Mixing and application of gypsum plasters shall be in accordance with American Standard Specifications for Gypsum Plastering.
3. Apply plaster in three (3) coats and in two (2) coats double up work-minimum thickness 1/2".
4. Gypsum lath shall be applied with long dimension across supports and with end joints staggered.
5. Nail gypsum lath with 12 or 13 gauge lathing nails having approximately 3/8" heads spaced not more than 4" on center with a minimum of four (4) nails in each lath. Use six (6) nails for 24" wide lath. Length of nail shall be that which shall provide at least 1" penetration in horizontal supports and 3/4" penetration in vertical supports.
6. Gypsum lath shall not be used as a base for Portland cement plaster.
7. Wood lath shall be securely nailed and wetted down prior to applying plaster.
8. Metal lath shall be applied according to manufacturer's directions whether used for patching or new work.
9. Patching of plaster, when called for in the Work Write-Up, shall include the removal of all loose material encountered until sound construction is reached, including the removal of rotted or deteriorated lath. Crack repair in plaster walls shall be cut out to a depth of not less than 1/4" and a width of 1/4". All areas are to be wetted thoroughly before applying plaster filler.

O. Wallboard

1. Shall be tape joint gypsum board, carefully fitted and sized prior to nailing in place. Minimum thickness is to be 1/2".
2. Water resistant gypsum board is to be installed on bathroom walls, or any high moisture area.
3. All joints are to be staggered.
4. Nails or sheetrock screws shall be driven with their shanks perpendicular to the face of the board and seated below the surface of the board without breaking the paper, in accordance with the following:

<u>Thickness</u>	<u>Ceiling</u>	<u>Side Walls</u>	<u>Type of Nail</u>
1/2"	7" O.C. 5" O.C.	No. 4 glue coated	
5/8"	6" O.C. 7" O.C.	1-7/8 6d cement coated	

5. Perforated Tape Mix:

- a. Shall comply with the recommendation of the manufacturer. A minimum temperature of 55 degrees F. shall be maintained in the room where the work is done until the cement is completely dry. Follow manufacturer's directions for application.
- b. Over joints, the tape shall be embedded in cement and covered with a thin layer of cement. A second and third coat shall be applied. Each coat shall be dry before applying the next coat. Each coat shall be feather-edged and extended beyond the previous coat, approximately 2". The finish coat shall be sanded lightly and imperfections filled in prior to any painting or decorating.
- c. Check to see that all nails have been driven so that their heads are below the surface without breaking the paper. Cover nails with three (3) applications of cement, allowing time to dry between each coat painted or other decoration.
- d. The final coat shall be sanded lightly before application of inside corners and shall be reinforced with tape imbedded in cement and finished the same as b. over joints.
- e. Outside wood molding, metal molding, or metal corner reinforcement shall protect corners. Metal corner re-enforcement shall be finished with two (2) coats of cement, as specified.
- f. Provide metal edge trim where wallboard edge abuts dissimilar material.

6. Finish to match existing texture.

P. Ceilings

1. Acoustical tile or 2' x 4' drop grid ceilings may be used.
2. Furring strips, when called for, shall be a minimum of 3/4" x 2" and attached with #8 nails driven through to ceiling joists at 10" intervals.
3. Suspended Ceilings
 - a. Exposed T-Bar, as specified, installed in strict accordance with manufacturer's recommendations.
 - b. Unexposed T-Bar, as specified, installed in strict accordance with manufacturer's recommendations.
4. Plaster/ Drywall
 - a. Use a heavy textured spray finish, when required, to repair cracked plaster and/or cracks in ceiling board.

Q. Siding Repairs/Replacement

1. Repairs of siding shall match material of existing siding.

2. Installation of siding shall be 12" lap hard board and/or Fiber cement. siding, unless otherwise noted on the Work Write-Up. Paint as called for in the painting specifications.
3. Remove siding only when called for in Work Write-Up.
4. Vinyl Siding:
 - a. Shall be 40 mills (.040") thick or better.
 - b. Colored completely through.
 - c. Siding shall be installed over a minimum 1/4" fan fold foam core, and shall carry a lifetime warranty for defects in material and color fading.
 - d. Warranty shall be placed in the owner(s) name and the contractor shall send all documentation to the company with a copy to the client.
 - e. Installation shall include wrapping all windows, soffit, fascia, porch ceiling, and pillars, et al.
 - f. Any exterior painted surfaces (including window sash) not wrapped shall be painted according to the painting specifications.
 - g. Owner(s) shall pick one siding color and one trim color from samples of siding and a complimentary trim color.
 - h. Owner(s) shall sign sample of color choice. No bright or "hot" colors allowed.

R. Caulking

1. Caulk shall be appropriate for materials being sealed. All caulk shall have a material life of at least 15 years.
2. Fully caulk around the following areas:
 - a. Window and door frames - all sides.
 - b. Where different materials meet.
 - c. Inside and outside corner trim boards.
 - d. Between foundation and wall plates or siding.
 - e. Around vents, fans, and window air conditioners.

S. Interior Doors

1. Shall be 1-3/8" hollow core.
2. Must be stained or painted to owner's option.
3. Complete with hardware and latch set.

T. Wallpapering - Not Allowed

U. Water Resistant Paneling

1. 1/8" thick, vinyl coated paneling recommended by the manufacturer for high moisture areas. Complete with vinyl trim at all joints.

2. Secure to sound backing using adhesive as recommended by manufacturer.
3. Owner(s) to select color and pattern from manufacturer's standard items. Owner(s) to sign sample selection.
4. Shall not be used as shower/tub surround.

V. Wood Paneling

1. Shall be 3/32" minimum thickness.
2. APA A-D interior paneling.
3. Furnish and install wood trim as required for a complete installation. Stain trim to match paneling.
4. Paneling to be selected by owner(s) based on specified allowance.
5. Owner(s) to sign sample of selection.

W. Kitchen Cabinets

1. Job Built:
 - a. Shall be 3/4" fir or birch plywood with solid wood band on all exposed edges.
 - b. Stain a minimum of two (2) coats of lacquer (selected by owner(s)).
2. Factory Built:
 - a. Residential grade, standard construction for wood cabinets.
 - b. Standard stain finish (selected by owner(s)).
 - c. Laminated (heat and stain resistant) counter top and edge trim with back splash.
3. Upper Cabinets:
 - a. Two (2) adjustable shelves.
 - b. Doors complete with hardware.
4. Base Cabinets:
 - a. Continuous drawers with standard glides across top section of all cabinets except sink area.
 - b. One (1) adjustable shelf behind doors - all areas below drawer sections.
 - c. Laminated (heat and stain resistant) counter top and edge trim with back splash.
 - d. Cabinets complete with hardware.

- X. Insulation - All insulation material shall be cellulose, unless otherwise specified in the Work Write-Up.
All attics must be insulated to a R-38, where possible.

1. **Insulation Barrier:**
 - a. Install insulation barriers specifically manufactured for use with the type of insulation installed.
 - b. Installation is to be in accordance with manufacturer's recommendations.
 - c. All chimneys, flues, recessed lights, and furnaces are to have insulation barriers around them.

2. **Gable Vents:**
 - a. Openings are to be cut with close tolerance to insure a watertight fit.
 - b. Vent is to be nailed or screwed into the frame.
 - c. All damaged siding is to be repaired or replaced. Siding without sheathing behind it is to have the vent framed in and mounted on the frame to insure a tight fit.
 - d. Ventilation ratio shall be not less than 1/300.

3. **Roof Vents:**
 - a. Roof vents are to be prepared and cut to close tolerance to insure a watertight fit.
 - b. The hole in the roof shall be no smaller than the throat size of the vent being installed so as not to restrict airflow.
 - c. Discarded materials are not to be dropped into the attic area. The Contractor shall remove discarded materials from the work site.
 - d. Vents (galvanized or aluminum) are to be sealed and nailed with galvanized or aluminum nails.
 - e. If the high/low method is used in installing roof vents, 50 percent of the vents must be located in the upper portion to be ventilated at least 3' above lower vents, with the remaining 50 percent of the required ventilation provided by eave, soffit, or roof vents.
 - f. In the case of the high/low method of ventilation, a ratio shall not use less than 1\150.
 - g. Vents are to appear evenly spaced from the ground and be neat in appearance.

4. **Soffit Vents:**
 - a. Vents are to be installed to insure free ventilation space to the attic area.
 - b. Vents are to be evenly spaced and a uniform distance from the sidewall.
 - c. Vents are to be screwed to the soffit.

5. **Attic Access:**
 - a. R-19 batt insulation is to be stapled or nailed to the top of the door.
 - b. Insulated manufactured doors may also be used. Insulation dams are to be constructed from 1" x 10" or better and are to be used to hold back attic insulation.
 - c. All attic accesses are to be weather-stripped using foam, tubular, or metal flap weather strip, nailed, or placed on the jamb.
 - d. When rebuilding an attic access, use 1" x 4" for the jamb and doorstop to form the flange. The door itself can be made of 3/4" plywood and insulated with R-19 batt insulation. 1" x 4", or smaller, is to be used as casing. The door and

surrounding area is to be airtight. Damaged ceiling area is to be repaired with like materials, all wood installed is to be sealed against moisture.

6. Floor Insulation:

- a. R-13 batt insulation is to be installed between floor joists, unless otherwise specified.
- b. Insulation is to be secured with nails, staples, or wire.
- c. The vapor barrier shall be towards the conditioned side.

7. Duct Insulation:

- a. All loose joints on hot air ducts (also air conditioning ducts in attics) shall be sealed to prevent air leakage.
- b. The ducts are to be wrapped using a standard R-5 or better vinyl wrapped fiberglass batt or standard duct wrap.
- c. Cellulose can be blown against the ductwork to hold the insulation.
- d. Duct insulation installed in a basement or crawl space is to have a vapor barrier installed to the outside.

8. Wall Insulation:

- a. Walls shall be insulated to a minimum of R-13.
- b. Building codes shall be considered regarding knob and tube wiring situations.
- c. All exterior walls are to be insulated.
- d. Siding is to be removed and replaced.
- e. Damaged siding is to be replaced.
- f. All sidewall insulation shall be densely packed cellulose.

9. Perimeter Insulation:

- a. R-13 faced fiberglass is to be securely fastened to the underside of the floor, extending down the boxing area, unless otherwise specified.
- b. Covers the inside foundation wall and then out into the crawlspace at least 2'.
- c. Vapor barrier, shall be 6 mil plastic with 2' overlapped seams.

10. Insulation Material (Mineral):

- a. Fiber Material or Product:
 - (1) Blanket batt conformance to F.5. HH-1-521E and ASTM C665-70.
 - (2) Board conformance to F.5. HH-1-526C and ASTM C612-70 or C726-72.
 - (3) Duct Material Conformance to F.5. HH-1-558B.

11. Insulation Material (Organic Fiber):

- a. Cellulose conformance to HH-1-515D dated April 1988.
- b. Block and Board conformance to F.S. LLL-12-525A and ASTM C208-72 and fire safety requirements.

12. Water Heater Blanket:

- a. Specifically manufactured for the purpose.
- b. Minimum R-5.
- c. Capable of meeting a flame spread classification not to exceed 150 (per ASTM E-84).

PLUMBING AND HEATING SPECIFICATIONS

A. Water Piping

1. Above ground shall be type L copper tubing with copper solder joint fittings made up with 95-5 solder as recommended by manufacturer or PEX.
2. Connections to valves shall be made with N.P.T. to solder adapters.
3. Schedule 40 PVC cold plastic water pipe may also be used for water piping and Schedule 40 CPVC for hot plastic water piping.
4. All plastic water pipe shall be supported every 4'.
5. The site of new pipes shall be in conformance with the Uniform Plumbing Code. Valves shall be 150# brass with ends similar to fittings. Valves shall be provided at each piece of equipment to permit removal without shutting off service. Unions will be provided to permit removal of equipment without cutting pipe.
6. Supply lines to faucets shall be flex lines or copper tubing.
7. Shut-offs is required on all supply lines.

B. Plumbing Fixtures

1. Trim shall be chrome plated and supplies to each water closet shall be provided with stop valves to permit removal without shutting off service.
2. All plumbing fixtures and trim called for in the Work Write-Up shall be of standard grade equal to American Standard, Crane, or Kohler.
3. Shower shall have a rod and shower curtain installed, at minimum.

C. Kitchen Equipment

1. Sink shall be double compartment stainless steel or enameled steel with self-sealing edge.
2. Refrigerator shall be a minimum 18 cu. ft., self-defrosting, 2-door unit appliance.
3. White or Almond (major brand mid priced model).
4. Ranges shall be electric or gas, with oven and oven light, and timer. White or Almond (major brand mid-priced range).
5. Gas ranges shall be attached to the gas supply with a steel flex gas line and shut off.

D. Heating Systems

1. Every heater that is existing or installed must be equipped with the following:

- a. One hundred percent safety.
 - b. Code approved, metalbestos vent.
 - c. Proper gas piping and stops, installed in accordance with recommendations of the Uniform Plumbing Code.
 - d. Shut-off valves.
 - e. All transite vents are to be removed.
 - f. Blower.
 - g. New Thermostat.
2. If no local codes, must meet National Gas Code (NGC).
 3. All new heating plants shall be sized and installed to provide sufficient proper heating and proper distribution for the size and requirements of the individual house. HVAC systems shall not be oversized by more than 15 percent.
 4. New furnaces shall be a minimum of 80 percent efficient, forced air with a warranty of not less than ten years. 90% efficient furnaces shall be sealed combustion.
 5. No outside units or attic units shall be installed or units in crawl space unless specified in the Work Write-Up.
 6. No flexible ductwork is allowed unless approved by inspector at the bid conference.
 7. No open return air is allowed. All ductwork is to be included in bid.
 8. All ductwork shall be sealed using mastic (example RCD #6).
 9. All ductwork in unconditioned spaces shall be insulated.
 10. Furnace and/or air conditioner shall be on separate circuits.
 11. All appliances must be installed in accordance with manufacturer's specifications.
 12. Must have easy access to filter.
 13. If furnace is in basement, it must be raised a minimum of 2".
 14. Plenum must be installed to receive future A-coil.

E. Water Heaters

1. Water heaters, existing or installed, shall have the following:
 - a. Pressure and temperature relief valve.
 - b. Proper vent, gas piping, and shut off.
 - c. All transite vents to be replaced with code approved vent.
2. Pressure and temperature relief valves shall be extended within 2' of the floor, but no closer than 6".

NOTE: All cutting of walls, floors, ceilings, partitions, etc., for the purpose of rehabilitation work and the air sealing of openings around same, including the removal of all debris caused thereby, shall be performed by the contractor performing the work. Repairs shall match existing materials, be finished to a smooth condition, and painted. (Refer to applicable Specifications for details.)

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP, THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

ELECTRICAL SPECIFICATIONS

All electrical work shall be in conformance with the National Electrical Code (NEC)

A. Wiring Devices

1. Single pole room lighting switches and three-way and four-way switches shall be UL approved.
2. Plug-ins shall be standard grounded receptacles except for plug-ins within 6' from water source shall be GFI.
3. Plates for all switches and receptacles shall be non-conducting type (including screws) and UL approved.
4. Dryer shall have separate 220 circuit.
5. Furnace, air conditioner, refrigerator, dishwasher, and stove shall have separate circuit.
6. Garbage disposal shall have separate circuit(s) and wall switched receptacle.

B. Lighting Fixtures

1. Contractor shall provide all lighting fixtures complete with lamps, glassware, mounting hardware, frames and trim, stems, ballasts, sockets, etc., to provide a complete operating UL approved fixture at each location, as called for in the Work Write-Up. Energy efficient compact fluorescents bulb(s) are required in all replaced fixtures.
2. Porcelain lamp-holders are prohibited unless approved by the Project Inspector.

C. Panel Boards

1. Shall be UL approved, with the minimum components as listed:
 - a. NEMA 1 enclosure for indoor and NEMA 3R for exterior use.
 - b. 200A mains (minimum) unless noted otherwise.
 - c. 200A 2-pole main breaker (minimum) unless otherwise noted.
 - d. Seven (7) 1-pole branch breakers (minimum).
 - e. 2-pole breakers as required.
 - f. Separate/Neutral.
 - g. Separate ground bar.
 - h. Additional equipment as required meeting the National Electrical Code (NEC).

* Unless specified differently by inspector.

D. Wire

1. Wire and cables shall be copper.
2. All wire and cable shall comply with the standardization rules of the AIEE as to conductivity and shall be free from kinks, splices, and defects when installed. Conductors shall be in accordance with the requirements of IPCEA Publication's latest edition.
3. All wire used in this project shall be new and shall be identified by type and by manufacturer.
4. Branch circuit wiring shall be non-metallic sheath Type NM.
5. Service conductors shall be Type XHHW.
6. All wiring shall be concealed in wall, ceiling, or floor cavities. Wiring required to be exposed shall, be installed in intermediate grade metal conduct.
7. All receptacles and other electrical equipment, except light fixtures, shall have a separate equipment ground conductor bonded to their metal cases, frames, etc. (except as noted).

E. Lightning Arresters

1. 175 v., 2-pole lightning arresters shall be installed per NEC.
2. Rewiring of house shall meet NEC.

F. Smoke Alarms

1. Install a 10-year Lithium battery smoke alarms unless rewiring house.
2. If rewiring, install hardwired smoke alarms.

Note: All cutting of walls, floors, ceilings, partitions, etc., for the purpose of rehabilitation work and the air sealing of openings around same, including the removal of all debris caused thereby, shall be performed by the contractor performing the work. Repairs shall match existing materials, be finished to a smooth condition, and painted. (Refer to applicable Specifications for details.)

CONTRACTOR MUST OBTAIN PRIOR WRITTEN APPROVAL FROM OWNER(S) BEFORE REMOVING FROM THE PREMISES ANY REUSABLE ITEMS, WHICH HAVE BEEN REPLACED.

PAINTING AND VARNISHING SPECIFICATIONS

Preparation and painting of all surfaces shall be completed in accordance with HUD's "Safe Work Practices".

A. Preparation of Surface

1. Exterior:

- a. Wood surfaces to be painted or varnished shall be prepared in accordance with HUD's Safe Work Practices in the removal of loose, chipping and peeling paint, rough spots, and any obvious oil and/or grease that may be covering existing wood or a paint.
- b. All paint chips and residue from the preparation must be REMOVED from the site.
- c. Where previous coats have chipped and peeled, the edge shall be wet scraped and puttied to obtain a smooth surface before new paint is applied.
- d. Exterior painting shall include painting all doors and windows, removing all storm windows, repairing windows, replacing all broken or cracked glass, and re-glazing and caulking all joints and seams with paintable caulk. Clean and reinstall all storm windows upon completion.
- e. All nail holes shall be puttied and all defects in the surface shall be eliminated by the repair or complete replacement of the defective part, this includes siding, sills, casings, etc.

2. Interior:

- a. Wood surfaces to be painted or varnished shall be prepared in accordance with HUD's Safe Work Practices in the removal of loose, chipping and peeling paint, rough spots, and any obvious oil and/or grease that may be covering existing wood or a paint.
- b. Plaster or wallboard surfaces shall be sound, smooth, and free from holes, cracks, or irregularities.
- c. All old wallpaper shall be entirely removed or covered with sheetrock, taped, then painted.
- d. No paint or varnish shall be applied until all nail holes have been puttied and all defects in woodwork have been eliminated by the insertion of dutchmen or complete replacement of the damaged part.

B. Materials – Lead based paint is in violation of HUD Lead-Based Paint Regulations and shall not be used.

1. Exterior:

- a. All exterior paint must meet or exceed Sherwin Williams 15 year # A-100 and shall be delivered to site in manufacturer's sealed containers.
- b. Each container shall be labeled giving type of paint color and application specification.
- c. Before proceeding with exterior painting, samples of colors shall be shown to the owner(s) for selection. The owner(s) is limited to one (1) base color and one (1)

trim color. Owner(s) shall sign the chosen color sample. Color options will be in a neutral color range, no bright or "hot colors" are allowed.

- d. The primer coat shall be Alkyd oil tinted to match topcoat, produced by the same manufacturer as the finish coat.

2. Interior:

- a. Interior paint shall meet or exceed Sherwin William's Classic #99 for flat, semi-gloss, or satin gloss, and shall be delivered to the site in the manufacturer's sealed containers.
- b. Primer for new sheetrock shall meet or exceed Sherwin William's Pro-Mar #400 latex primer.
- c. Before proceeding with painting or varnishing, color samples shall be shown to the owner(s) for selection. The owner(s) is limited to one (1) base color and one (1) trim color. Owner(s) shall sign the chosen color sample.
- d. Texture finish sample shall be submitted to the owner(s) for approval before application. Owner(s) shall sign sample choice.
- e. The finish coat in kitchens and bathrooms shall be semi-gloss enamel and provide a durable and washable surface.
- f. The primer shall be tinted to match topcoat, produced by the same manufacturer as the finished coat.
- g. Varnish shall be polyurethane varnish.

3. Application:

a. Exterior:

- (1) All paint, unless specifically approved otherwise, shall be applied by brush or roller.
- (2) Apply each material at manufacturer's recommended spreading rate.
- (3) Do not apply exterior paint when temperature is 50° F. and falling, or when temperature is below 40° F. and steady, or in rainy, damp, or frosty weather until surface is thoroughly dry. Contact the Project Inspector if considering the Sherwin Williams product "Low Temp 35"
- (4) The Contractor shall be responsible for protecting all areas and surfaces that are not to receive paint and shall clean and repair or replace any such areas, surfaces, or items so damaged.
- (5) Finish work shall be uniform, of approved color, smooth, and free from runs, sags, and defective brushing and rolling. Edges of paint adjoining other materials or colors shall be sharp and clean.

b. Interior:

- (1) New paint applied on walls that are painted with a glossy paint or has a shine must be first prepared to remove glossy surface and cleaned prior to painting.
- (2) The Contractor shall be responsible for protecting all areas and surfaces that are not to receive paint and shall clean and repair or replace any such areas, surfaces, or items so damaged.

- (3) Finish work shall be uniform, of approved color, smooth, and free from runs, sags, and defective brushing and rolling. Edges of paint adjoining other materials or colors shall be sharp and clean.
 - (4) Ceiling paint will be allowed when applying to ceilings.
- c. Required Coatings:
- (1) Exterior wood, etc. (previously painted).
 - i. One (1) coat of exterior wood primer, tinted same as topcoat.
 - ii. Two (2) coats exterior latex house paint.
 - iii. Warranty is void if not followed.
 - (2) Exterior wood and hardboard (bare):
 - i. One (1) coat exterior wood primer; tinted same as topcoat.
 - ii. Two (2) coats exterior latex house paint.
 - iii. Warranty is void if not followed.
 - (3) Interior drywall:
 - i. Two (2) coats latex satin-gloss enamel wall paint.
 - ii. New drywall (1) coat of latex primer, (2) coats of satin-gloss enamel wall paint.
 - (4) Wood porch floors and wood steps:
 - i. Two (2) coats porch floor enamel.
 - ii. Redwood and CCA does not need to be painted.
 - (5) Spray textured drywall ceilings:
 - i. One (1) coat latex flat wall paint.
 - ii. One (1) coat spray texture.

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP, THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

ROOFING SPECIFICATIONS

Replacement of roof, when called for on the Work Write-Up, shall be defined as removing all existing shingles, flashings, valley tin, drip edge, and felt; then providing all new felt, valley tin, flashing, metal drip edge, and shingles, et al. Damaged sheathing or areas without solid sheathing shall have 15/32" construction grade plywood or 7/16" OSB Louisiana Pacific Interseal installed for sheathing

A. Sheathing

1. Shall be 15/32" construction (CDX) grade plywood or 7/16" OSB Louisiana Pacific Interseal, APA Exposure #1 criteria or equal (THIS PRODUCT IS NOT "NORBOARD").
2. Nail sheathing with cement coated, rosin coated, or ring shank nails placed on 4" centers on all edges and over the face of each piece.

B. Underlayment

1. Shall be asphalt saturated felt, minimum 30#, which has low vapor resistance. Coated felts or laminated waterproof papers, which act as vapor barriers, should not be used.
2. Underlayment should be applied over the entire roof as soon as the roof sheathing has been completed.
3. Underlayment should be lapped 1' from both sides over all hips and ridges.
4. Only sufficient fasteners are to be used to hold the underlayment securely in place until shingles are applied.
5. Shingles are not to be applied over wet underlayment.

C. Shingles

1. Shall be new Heritage or 3-tab, (equal to or better than 25-year), asphalt shingle squares, (nominal) weight, installed according to manufacturer's specifications, using nails only.
2. Cut shingles at valleys (2" each side of valley center to expose a minimum of 4"). Woven valleys are not allowed.
3. Owner(s) to select shingle color by signing a sample of the chosen shingle. Contractor is to keep signed shingle until final completion certificate is signed.

D. Metal Roofing

1. Shall be 29 gauge painted metal roofing equal to or better than Metal Sales Pro Panel II.
2. All metal roofing shall be attached with the proper length metal to wood screws with seal washers.

3. Owners shall sign sample of color choice. Color options will be a neutral color range, no bright or “hot colors” are allowed.

D. Flashing

Shall be 30 nominal gauge galvanized steel securely fastened and tarred to watertight and water-shedding condition.

E. Gutters/Downspouts/Splash Blocks

1. Standard, 5" Ogee, galvanized, white, steel, or 26 gauge aluminum gutters, securely fastened at 4' maximum intervals. Owner(s) to chose color to compliment house.
2. Downspouts may be round or square, corrugated and anchored at top and bottom.
3. All joints are to be watertight.
4. Install 3' splash blocks at all downspout locations. If not concrete, the splash blocks shall be anchored.
5. Install blocking and/or fascia board where necessary between gutter and eaves to properly align gutter to receive run-off from roof.
6. Owner(s) shall sign sample of color choice. No bright or “hot” colors allowed.

NOTE: SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP. THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

DEMOLITION SPECIFICATIONS

A. Structures, Trees, and Site Clearance

1. The removal and proper disposal of the dilapidated structure(s). Check with the landfill operator prior to beginning demolition for instructions on "proper disposal".
2. The capping off of the sewer and waterlines.
3. The complete removal of all concrete, cement or blocks, back-fill any basement to grade. Level site to be mowed. Seeding is the responsibility of the property owner.
4. Only remove trees that are within 6' of structure to be demolished.

B. Abandoned Septic Systems

1. Remove all liquid contents and the top of the tank. If the pit begins to fill with water, puncture the floor.
2. Fill the cavity with earth, sand, or gravel. Pack the fill to 5' below the surface, knock down sides 2' below grade, and then complete the fill with subsoil, packing as fill is being installed. The structure is now ready for the plug.
3. A minimum of a 6" of bentonite clay or 24" reinforced cement plug is to be applied. The plug must extend beyond the lining of the original diameter of the hole.

C. Abandoned Wells

1. Remove any pumping equipment.
2. Disinfect the water prior to filling by adding 1 gallon of chlorine bleach for every 10' of water.
3. Fill the well with sand and gravel mix to the water level.
4. Fill the remainder of the well above the water level with natural clay material (subsoil low in organic matter) compacted to form a solid column.
5. Six feet from top of casing, pour a 3' plug of cement or neat cement or sodium bentonite clay.
6. Excavate around the casing to the top of the plug, cut off casing, and backfill the excavation with compacted earth material.

Note: Contractor may be instructed to cut the casing at 4' below grade to allow the plug to extend beyond the edge of the casing. This mushroom plug will help provide extra protection from water movement along either side of the casing.

SAFE WORK PRACTICES

All work must be conducted in a lead safe work practice manner according to HUD Approved Lead Safe Work Practice Training by someone who has received HUD Approved Lead Safe Work Practices Training, is a Kansas Department of Health and Environment certified Lead Based Paint Worker, or is supervised by a Kansas Department of Health and Environment Lead Based Paint Supervisor.

Reference **Lead Paint Safety, A Field Guide for Painting, Home Maintenance, and Renovation Work**, U.S. Department of Housing and Urban Development Office of Healthy Homes and Lead Hazard Control.

A. Prohibited Methods of Lead Based Paint Removal

1. Open flame burning or torching.
2. Machine sanding or grinding without a high-efficiency particulate air (HEPA) local exhaust control.
3. Abrasive blasting or sandblasting without a HEPA local exhaust control.
4. Heat guns operating above 1100° F. or charring the paint.
5. Dry sanding or dry scraping, except dry scraping in conjunction with heat guns or within 1' of electrical outlets.
6. Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with regulations of the Consumer Product Safety Commission.

B. Occupant Protection and Worksite Preparation

1. Occupants and their belongings shall be protected.
2. The worksite must be prepared according to safe work practice standards.

C. Cleaning for Clearance

After rehabilitation/hazard reduction activities have been completed, the worksite shall be cleaned using cleaning methods, products, and devices that are successful in cleaning up dust-lead hazards, such as a HEPA vacuum or other method of equivalent efficacy, and lead specific detergents or equivalent.

D. Safe Work Practices Are Not Required

1. On a home built after 1978.
2. On housing exclusively for the elderly (62 years of age or older) or people with disabilities unless a child under six is expected to reside there.
3. On zero-bedroom dwellings.

4. On property that has been found to be free of lead-based paint by a certified lead-based paint inspector/risk assessor.
5. On property where all lead-based paint has been removed.
6. On unoccupied housing that will remain vacant until it is demolished.
7. On non-residential property.
8. On any rehabilitation or housing improvement that does not disturb a painted surface.

Subpart J—Rehabilitation

Source: 64 FR 50212, Sept. 15, 1999, unless otherwise noted.

§ 35.900 Purpose and applicability.

(a) *Purpose and applicability.* (1) The purpose of this subpart J is to establish procedures to eliminate as far as practicable lead-based paint hazards in a residential property that receives Federal rehabilitation assistance under a program administered by HUD. Rehabilitation assistance does not include project-based rental assistance, rehabilitation mortgage insurance or assistance to public housing.

(2) The requirements of this subpart shall not apply to HOME funds which are committed to a specific project in accordance with §92.2 of this title before September 15, 2000. Such projects shall be subject to the requirements of §92.355 of this title that were in effect at the time of project commitment or the requirements of this subpart.

(3) For the purposes of the Indian Housing Block Grant program and the CDBG Entitlement program, the requirements of this subpart shall apply to all residential rehabilitation activities (except those otherwise exempted) for which funds are first obligated on or after September 15, 2000. For the purposes of the State, HUD-Administered Small Cities, and Insular Areas CDBG programs, the requirements of this subpart shall apply to all covered activities (except those otherwise exempted) for which grant funding is awarded to the unit of local government by the State or HUD, as applicable, on or after September 15, 2000. For the purposes of the Emergency Shelter Grant Program (42 U.S.C. 11371–11378) and the formula grants awarded under the Housing Opportunities for Persons with AIDS Program (HOPWA) (42 U.S.C. 12901 et. seq.), the requirements of this subpart shall apply to activities for which program funds are first obligated on or after September 15, 2000.

(4) For the purposes of competitively awarded grants under the HOPWA Program and the Supportive Housing Program (42 U.S.C. 11481–11389), the requirements of this subpart shall apply to grants awarded under Notices of Funding Availability published on or after September 15, 2000.

(5) For the purposes of the Indian CDBG program (§1003.607 of this title), the requirements of this subpart shall not apply to funds whose notice of funding availability is announced or funding letter is sent before September 15, 2000. Such project grantees shall be subject to the regulations in effect at the time of announcement or funding letter.

(b) The grantee or participating jurisdiction may assign to a subrecipient or other entity the responsibilities set forth in this subpart.

§ 35.905 Definitions and other general requirements.

Definitions and other general requirements that apply to this subpart are found in subpart B of this part.

§ 35.910 Notices and pamphlet.

(a) *Notices.* In cases where evaluation or hazard reduction or both are undertaken as part of federally funded rehabilitation, the grantee or participating jurisdiction shall provide a notice to occupants in accordance with §35.125. A visual assessment alone is not considered an evaluation for the purposes of this part.

(b) *Lead hazard information pamphlet.* The grantee or participating jurisdiction shall provide the lead hazard information pamphlet in accordance with §35.130.

[69 FR 34272, June 21, 2004]

§ 35.915 Calculating Federal rehabilitation assistance.

(a) *Applicability.* This section applies to recipients of Federal rehabilitation assistance.

(b) *Rehabilitation assistance.* (1) Lead-based paint requirements for rehabilitation fall into three categories that depend on the amount of Federal rehabilitation assistance provided. The three categories are:

(i) Assistance of up to and including \$5,000 per unit;

(ii) Assistance of more than \$5,000 per unit up to and including \$25,000 per unit;
and

(iii) Assistance of more than \$25,000 per unit.

(2) For purposes of implementing §§35.930 and 35.935, the amount of rehabilitation assistance is the lesser of two amounts: the average Federal assistance per assisted dwelling unit and the average per unit hard costs of rehabilitation. Federal assistance includes all Federal funds assisting the project, regardless of the use of the funds. Federal funds being used for acquisition of the property are to be included as well as funds for construction, permits, fees, and other project costs. The hard costs of rehabilitation include all hard costs, regardless of source, except that the costs of lead-based paint hazard evaluation and hazard reduction activities are not to be included. Costs of site preparation, occupant protection, relocation, interim controls, abatement, clearance, and waste handling attributable to compliance with the requirements of this part are not to be included in the hard costs of rehabilitation. All other hard costs are to be included, regardless of whether the source of funds is Federal or non-Federal, public or private.

(c) *Calculating rehabilitation assistance in properties with both assisted and unassisted dwelling units.* For a residential property that includes both federally assisted and non-assisted units, the rehabilitation costs and Federal assistance associated with non-assisted units are not included in the calculations of the average per unit hard costs of rehabilitation and the average Federal assistance per unit.

(1) The average per unit hard costs of rehabilitation for the assisted units is calculated using the following formula:

$$\text{Per Unit Hard Costs of Rehabilitation } \$ = (a/c) + (b/d)$$

Where:

a = Rehabilitation hard costs for all assisted units (not including common areas and exterior surfaces)

b = Rehabilitation hard costs for common areas and exterior painted surfaces

c = Number of federally assisted units

d = Total number of units

(2) The average Federal assistance per assisted dwelling unit is calculated using the following formula:

$$\text{Per unit Federal assistance} = e/c$$

Where:

e = Total Federal assistance for the project

c = Number of federally assisted units

[69 FR 34272, June 21, 2004]

§ 35.920 [Reserved]

§ 35.925 Examples of determining applicable requirements.

The following examples illustrate how to determine whether the requirements of §§35.930(b), (c), or (d) apply to a dwelling unit receiving Federal rehabilitation assistance (dollar amounts are on a per unit basis):

(a) If the total amount of Federal assistance for a dwelling is \$2,000, and the hard costs of rehabilitation are \$10,000, the lead-based paint requirements would be

those described in §35.930(b), because Federal rehabilitation assistance is up to and including \$5,000.

(b) If the total amount of Federal assistance for a dwelling unit is \$6,000, and the hard costs of rehabilitation are \$2,000, the lead-based paint requirements would be those described in §35.930(b). Although the total amount of Federal dollars is more than \$5,000, only the \$2,000 of that total can be applied to rehabilitation. Therefore, the Federal rehabilitation assistance is \$2,000 which is not more than \$5,000.

(c) If the total amount of Federal assistance for a unit is \$6,000, and the hard costs of rehabilitation are \$6,000, the lead-based paint requirements are those described in §35.930(c), because the amount of Federal rehabilitation assistance is more than \$5,000 but not more than \$25,000.

(d) If eight dwelling units in a residential property receive Federal rehabilitation assistance [symbol c in §35.915(c)(2)] out of a total of 10 dwelling units [d], the total Federal assistance for the rehabilitation project is \$300,000 [e], the total hard costs of rehabilitation for the dwelling units are \$160,000 [a], and the total hard costs of rehabilitation for the common areas and exterior surfaces are \$20,000 [b], then the lead-based paint requirements would be those described in §35.930(c), because the level of Federal rehabilitation assistance is \$22,000, which is not greater than \$25,000. This is calculated as follows: The total Federal assistance per assisted unit is \$37,500 ($e/c = \$300,000/8$), the per unit hard costs of rehabilitation is \$22,000 ($a/c + b/d = \$160,000/8 + \$20,000/10$), and the level of Federal rehabilitation assistance is the lesser of \$37,500 and \$22,000.

[64 FR 50212, Sept. 15, 1999, as amended at 69 FR 34272, June 21, 2004]

§ 35.930 Evaluation and hazard reduction requirements.

(a) *Paint testing.* The grantee or participating jurisdiction shall either perform paint testing on the painted surfaces to be disturbed or replaced during rehabilitation activities, or presume that all these painted surfaces are coated with lead-based paint.

(b) *Residential property receiving an average of up to and including \$5,000 per unit in Federal rehabilitation assistance.* Each grantee or participating jurisdiction shall:

(1) Conduct paint testing or presume the presence of lead-based paint, in accordance with paragraph (a) of this section. If paint testing indicates that the painted surfaces are not coated with lead-based paint, safe work practices and clearance are not required.

(2) Implement safe work practices during rehabilitation work in accordance with §35.1350 and repair any paint that is disturbed.

(3) After completion of any rehabilitation disturbing painted surfaces, perform a clearance examination of the worksite(s) in accordance with §35.1340. Clearance is not required if rehabilitation did not disturb painted surfaces of a total area more than that set forth in §35.1350(d).

(c) *Residential property receiving an average of more than \$5,000 and up to and including \$25,000 per unit in Federal rehabilitation assistance.* Each grantee or participating jurisdiction shall:

(1) Conduct paint testing or presume the presence of lead-based paint, in accordance with paragraph (a) of this section.

(2) Perform a risk assessment in the dwelling units receiving Federal assistance, in common areas servicing those units, and exterior painted surfaces, in accordance with §35.1320(b), before rehabilitation begins.

(3) Perform interim controls in accordance with §35.1330 of all lead-based paint hazards identified pursuant to paragraphs (c)(1) and (c)(2) of this section.

(4) Implement safe work practices during rehabilitation work in accordance with §35.1350 and repair any paint that is disturbed and is known or presumed to be lead-based paint.

(d) *Residential property receiving an average of more than \$25,000 per unit in Federal rehabilitation assistance.* Each grantee or participating jurisdiction shall:

(1) Conduct paint testing or presume the presence of lead-based paint in accordance with paragraph (a) of this section.

(2) Perform a risk assessment in the dwelling units receiving Federal assistance and in associated common areas and exterior painted surfaces in accordance with §35.1320(b) before rehabilitation begins.

(3) Abate all lead-based paint hazards identified by the paint testing or risk assessment conducted pursuant to paragraphs (d)(1) and (d)(2) of this section, in accordance with §35.1325, except that interim controls are acceptable on exterior surfaces that are not disturbed by rehabilitation and on paint-lead hazards that have an area smaller than the *de minimis* limits of §35.1350(d). If abatement of a paint-lead hazard is required, it is necessary to abate only the surface area with hazardous conditions.

(4) Implement safe work practices during rehabilitation work in accordance with §35.1350 and repair any paint that is disturbed and is known or presumed to be lead-based paint.

[64 FR 50214, Sept. 15, 1999; 65 FR 3387, Jan. 21, 2000, as amended at 69 FR 34273, June 21, 2004]

§ 35.935 Ongoing lead-based paint maintenance activities.

In the case of a rental property receiving Federal rehabilitation assistance under the HOME program, the grantee or participating jurisdiction shall require the property owner to incorporate ongoing lead-based paint maintenance activities in regular building operations, in accordance with §35.1355(a).

[69 FR 34273, June 21, 2004]

§ 35.940 Special requirements for insular areas.

If a dwelling unit receiving Federal assistance under a program covered by this subpart is located in an insular area, the requirements of this section shall apply and the requirements of §35.930 shall not apply. All other sections of this subpart J shall apply. The insular area shall conduct the following activities for the dwelling unit, common areas servicing the dwelling unit, and the exterior surfaces of the building in which the dwelling unit is located:

(a) *Residential property receiving an average of up to and including \$5,000 per unit in Federal rehabilitation assistance.* (1) Implement safe work practices during rehabilitation work in accordance with §35.1350 and repair any paint that is disturbed by rehabilitation.

(2) After completion of any rehabilitation disturbing painted surfaces, perform a clearance examination of the worksite(s) in accordance with §35.1340. Clearance shall be achieved before residents are allowed to occupy the worksite(s). Clearance is not required if rehabilitation did not disturb painted surfaces of a total area more than that set forth in §35.1350(b).

(b) *Residential property receiving an average of more than \$5,000 per unit in Federal rehabilitation assistance.* (1) Before beginning rehabilitation, perform a visual assessment of all painted surfaces in order to identify deteriorated paint.

(2) Perform paint stabilization of each deteriorated paint surface and each painted surface being disturbed by rehabilitation, in accordance with §§35.1330(a) and (b).

(3) After completion of all paint stabilization, perform a clearance examination of the affected dwelling units and common areas in accordance with §35.1340. Clearance shall be achieved before residents are allowed to occupy rooms or spaces in which paint stabilization has been performed.