



Housing Quality Standards (HQS)

and

HOME Rehabilitation Standards

City of Moreno Valley
Financial & Management Services Dept.
Financial Operations Division
14177 Frederick St. PO Box 88005
Moreno Valley, CA 92552-0805
PH: 951.413.3450 Email: grantsadmin@moval.org

TABLE OF CONTENTS

HQS & REHABILITATION STANDARDS INTRODUCTION

1 - HEALTH, SAFETY, AND LIFE-THREATENING DEFICIENCIES	2
2 - SITE	4
3 - EXTERIOR BUILDING SURFACES	7
4 - FOUNDATIONS & STRUCTURES.....	9
5 - WINDOWS & DOORS	10
6 - ROOFING	11
7 - INSULATION & VENTILATION	12
8 - INTERIOR STANDARDS	14
9 - ELECTRIC	15
10-PLUMBING SYSTEM	17
11-HVAC.....	18
12-APPLIANCES	20
13-DISASTER MITIGATION.....	20

Housing Quality Standards

The standards contained in this document establish the City of Moreno Valley Housing Quality Standards for the acquisition, rehabilitation and/or new construction of single-family and multi-family properties that are federally funded through the City Housing Programs. Pursuant to 24CFR§92.251, housing that is constructed or rehabilitated with HOME funds must meet all applicable local codes, ordinances, and rehabilitation standards, at the time of project completion. The housing will conform to Housing and Urban Department Housing Quality Standards, in addition with the City of Moreno Valley Housing Quality Standards, along with applicable municipal laws, or codes, and Building Code Standards - Title 24 California Code of Regulations current editions of the Building, Residential, Plumbing, Mechanical, Electrical, Green and Energy Code.

The primary objective of the Housing Quality Standards is to establish the criteria for the life, health and safety of the residents at the property and to repair/renovate/construct quality housing units. All housing units that receive federal assistance through the City of Moreno Valley may be inspected prior to, during construction, and upon completion of construction depending on the type of activity, for compliance with these requirements. A year-end warranty inspection may also be required on Single Family units that undergo housing rehabilitation and repair services. Multi-family housing units are inspected initially, upon completion, and at least annually throughout the affordability period for compliance with Housing Quality Standards requirements.

HOME Rehabilitation Standards

The City of Moreno Valley staff or its Subrecipient, contracted to perform the professional and technical services required for the Program, will review and approve work write-ups (i.e., plans and specifications) and written cost estimates to determine costs are reasonable and plans and specs are in compliance with these written rehabilitation standards. These standards apply to all HOME projects involving rehabilitation. Agencies and/or subrecipients responsible for the delivery of rehabilitation services will perform: (1) an initial inspection to determine deficiencies, and (2) progress and final inspections to ensure work is done in accordance with contract-approved work write-up, and applicable codes. Housing units must be free of deficiencies selected by HUD from the list of Uniform Physical Condition Standards as set forth in 24 CFR 5.705.

The City of Moreno Valley has adopted the following, written rehabilitation standards to provide a common basis for contractor bids. This ensures that all contractors are bidding work using identical methods and material. The following is a general overview by category.

1 Health, Safety, and Life-Threatening Deficiencies

Lead Based Paint (LBP)	
Repair Standard	Minimum Life 5 yrs.
<p>For all houses constructed prior to 1978 - four (4) floors, two (2) window sills and two (2) window troughs (all randomly selected) plus a blank sample must be submitted to an EPA-accredited lead analytical laboratory and the dust samples must pass a dust wipe test for lead content as per the protocol in the HUD Guidelines. Lead-safe work practices must be followed, and only certified abatement contractors used to perform the work. See: http://www.hud.gov/offices/lead/lbp/hudguidelines/</p> <p>HUD lead-based paint requirements: 24 CFR part 35</p>	
Replacement Standard	Minimum Life 20 yrs.
<p>When stabilization of surfaces containing LBP is impractical, the most affordable solution for abatement of the component will be chosen. Walls containing LBP may be covered with drywall or gutted and replaced with drywall. Trim and other wood or metal components containing LBP may be removed and replaced with similar materials. Lead-safe work practices must be followed, and only certified abatement contractors used to perform the work.</p>	

Contaminants	
Repair Standard	Minimum Life 5 yrs.
NA	
Replacement Standard	
<p>All materials installed will meet the following standards to minimize the presence of Volatile Organic Compounds (VOC) and Formaldehyde:</p> <ul style="list-style-type: none"> • All paints and primers must meet the most recent Green Seal G-11 Environmental Standard. Http://www.greenseal.org/certification/standards/paints_and_coatings.pdf • Adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. http://www.aqmd.gov/rules/reg/reg11/r1168.pdf • All caulks and sealants, including floor finishes, must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District. • All particleboard components will meet ANSI A208.1 for formaldehyde emission limits, or all exposed particleboard edges will be sealed with a low-VOC sealant or have a factory-applied, low-VOC sealant prior to installation. All MDF edges will meet ANSI A208.2 for formaldehyde emission limits, or all exposed MDF edges will be sealed with a low-VOC sealant or have a factory-applied, low-VOC sealant prior to installation. 	

HQS & REHABILITATION STANDARDS

Asbestos	
Repair Standard	Minimum Life NA
Non-friable intact Asbestos materials that are not creating a hazard such as cementitious exterior wall shingles may be left intact and painted if appropriate. Asbestos-resilient floor tiles may be labeled as such and covered with underlayment and new resilient flooring.	
Replacement Standard	Minimum Life NA
Friable asbestos components such as boiler or pipe insulation, badly deteriorated cementitious shingles or deteriorated flooring will be removed and, if necessary, replaced with non-hazardous materials.	

Radon	
Repair Standard	Minimum Life 5 yrs.
All housing in this program will be subject to a “Short Term” Radon Test, and if the result is a reading of 4 pCi/L or higher, a follow-up “Short Term” test will be performed. When a second test is required, average the results. If the average is above 4 pCi/L, remediation will be required.	
Replacement Standard	Minimum Life 20 yrs.
If, as a result of the testing above, there is a presence of Radon at or above the 4 pCi/L level, remediation will be undertaken per the EPA guidance in their Consumer’s Guide to Radon Reduction. http://www.epa.gov/radon/pubs/consguid.html	

Mold	
Repair Standard	Minimum Life NA
Any presence of mold is unacceptable and must be addressed per the National Center for Healthy Housing protocol “Creating a Healthy Home.” http://www.nchh.org/Portals/0/Contents/FloodCleanupGuide_screen_.pdf	
Replacement Standard	Minimum Life NA
All carpeting, drywall or other gypsum-based wall coverings or any other non-structural components with mold present will be removed and replaced. The National Center for Healthy Housing protocol “Creating a Healthy Home” will be followed for remediation of structural components.	

HQS & REHABILITATION STANDARDS

Fire Safety - Egress	
Repair Standard	Minimum Life NA
NA	
Replacement Standard	Minimum Life NA
Egress windows are required in all new sleeping and living areas unless other secondary means of escape requirements are met. The minimum dimensions for egress window clear openings are 20” wide by 24” tall, with a Net clear opening of 5.7 square feet. No bedrooms should be created in attics or basements unless Life Safety Code/Emergency Escape and egress... requirements are met.	

Fire and CO Alarms and Emergency Power	
Repair Standard	Minimum Life 5 years
Existing fire and smoke, carbon monoxide and security systems that meet code will be repaired to operating condition. Smoke Alarms shall be listed in accordance with UL 217. Carbon Monoxide alarms shall be listed in accordance with UL2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.	
Replacement Standard	
Directly wired smoke detectors shall be required in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms, and in each floor level.	
In a dwelling where there is a fuel burning appliance, fireplace, or an attached garage. CO detectors are to be installed on each floor level and in the immediate vicinity outside of the bedrooms. Where a fuel burning appliance is located inside the bedroom or its attached bathroom, a carbon monoxide detector shall be installed within the bedroom.	

2 – Site

Grading	
Repair Standard	Minimum Life 5 yrs.
All grading adjacent to the building and for a distance of at least 10 feet away from the building will slope away from the structure at a pitch of at least 1 inch per foot. All bare earth will be reseeded or sod will be installed to cover.	
Replacement Standard	
NA	

HQS & REHABILITATION STANDARDS

Outbuildings	
Repair Standard	Minimum Life 5 yrs.
Unsafe and blighted structures, including outbuildings, will be removed if it is not financially feasible to complete the repairs required to make them structurally sound, leak-free, with lead hazards stabilized. Detached garages should have operable and lockable doors and windows.	
Replacement Standard	
No outbuilding replacement is permitted in this program.	

Fencing	
Repair Standard	Minimum Life 3 yrs.
Fencing on property lines is preferred. If repairs are needed, replacing sections in kind is permissible if the budget permits.	
Replacement Standard	
Wholesale replacement of deteriorated fencing is discouraged and should only be undertaken if the budget permits.	

Paving And Walks	
Repair Standard	Minimum Life 5 yrs.
Essential paving, such as front sidewalks and driveways with minor defects, will be repaired to match. Tripping hazards greater than 3/4" must be addressed. Non-essential, highly deteriorated paving, such as sidewalks that are unnecessary, will be removed and appropriately landscaped.	
Replacement Standard	
Un-repairable essential walks and driveways will be replaced with permeable paving when financially feasible or concrete per City Ordinance. Wood-framed, handicapped-accessible ramps are an eligible expense and will be completed on a case-by-case basis in accordance with accessibility requirements in 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable.	

HQS & REHABILITATION STANDARDS

Trees and Shrubbery	
Repair Standard	Minimum Life 5 yrs
Trees that are dead, dying, or hazardous will be removed. Removal will include cutting close to the ground, grinding of the stump to 12 inches below the finished grade, installation of topsoil and re-seeding.	
Replacement Standard	
Replacement trees and shrubs are permitted if economically feasible and must be selected from the State Extension Service list of local, drought-resistant and non-invasive plant materials. In placement of trees, attention should be paid to shading the house to reduce air conditioning costs. Also, trees should be located a sufficient distance from foundations, sidewalls, walkways, driveways, patios and sidewalks in order to avoid future damage from root growth and branches brushing against the structure. Setbacks from structures should typically exceed half of the canopy diameter of a full-grown example of the species.	

Lawn & Yard	
Repair Standard	Minimum Life 1 yrs.
Bare section of lawn will be reseeded with State Extension Service-recommended, drought-resistant varieties such as Tall Fescue.	
Replacement Standard	
Wholesale replacement of lawn grasses is not allowed, over-seeding is permitted with State Extension Service-recommended, drought-resistant varieties such as Tall Fescue.	

Exterior House Numbers and Mailboxes	
Repair & Replacement Standard	Minimum Life 5 years
All houses will have 4" house numbers clearly displayed. Address identification shall be legible and placed in a position that is visible from the street or road fronting the property.	

Others - Site	
Repair & Replacement Standard	
<p>Property containing abandoned, damaged, broken equipment; furniture or other discarded items will be removed and properly disposed of in an approved manner.</p> <p>Swimming pools, spas, fountains or water features will be free of stagnant water and nuisance migratory insects and mosquito larvae. Open excavations will be properly protected, secured or back filled with an approved and debris free organic material. Fence and gate requirements for pools and spas will be maintained under the code in which they were approved and installed.</p> <p>All utilities will be intact and operational for their designed and intended use. Private and public waste disposal systems will be connected and appropriately discharge the disposal of waste.</p>	

3 - Exterior Building Surfaces

Exterior Cladding & Caulking	
Repair Standard	Minimum Life 10 years
<p>Siding and trim will be intact and weatherproof. All exterior wood components will have a minimum of one continuous coat of paint, and no exterior painted surface will have any deteriorated paint. For caulking, exterior grade shall be used. Buildings designated as historic will have existing wood siding repaired in kind. New exterior wood will blend with existing and will be spot-primed and top-coated in a lead-safe manner.</p>	
Replacement Standard	
<p>Buildings not designated as historic may have siding replaced with vinyl siding to match the existing configuration. CertainTeed, Mastic, and Wolverine brands are approved. If replaced, soffit material will be vented/perforated vinyl. New wood components will be FSC certified.</p> <p>http://www.fsc.org/</p>	

HQS & REHABILITATION STANDARDS

Exterior Porches	
Repair Standard	Minimum Life 5 years
Deteriorated concrete porches will be repaired when possible. Unsafe wood porch components will be repaired with readily available materials to conform closely to historically accurate porches in the neighborhood. Porch repairs will be structurally sound, with smooth and even decking surfaces. Deteriorated wood structural components will be replaced with preservative-treated wood.	
Replacement Standard	
Porches on building designated as historic will be rebuilt to conform closely to historically accurate porches in the neighborhood. Decks on non-historic porches will be replaced with 5/4" preservative-treated decking. Replaced railings will meet code. Replaced wood structural components will be preservative-treated.	

Exterior Railings	
Repair Standard	Minimum Life 5 years
Existing handrails will be structurally sound. Guard rails are required on any accessible area with a walking surface over 30" above the adjacent ground level. Sound railings may be repaired if it is possible to maintain the existing style. On historic structures railing repairs will be historically sensitive.	
Replacement Standard	
Handrails will be present on one side of all interior and exterior steps or stairways with more than two risers and around porches or platforms over 30" above the adjacent ground level, and will meet local codes. Handrails and guard rails will conform to the style of similar components in the neighborhood. But, in no case, shall be less than what is required by adopted building codes. On historic structures new railings will be historically sensitive.	

Exterior Steps and Decks	
Repair Standard	Minimum Life 5 years
Steps, stairways, and porch decks will be structurally sound, reasonably level, with smooth and even surfaces. Repairs will match existing materials,	
Replacement Standard	
In non-historic structures wood decking may be replaced with 5/4" X 6" preservative-treated material and new steps will be constructed from nominal 2" preservative-treated wood. On historic structures new wood decking will be 3/4" clear T & G fir, primed on all 6 sides before installation.	

4 - Foundations & Structure

Firewalls	
Repair Standard	Minimum Life 5 years
Party walls will be maintained without cracks and plaster deterioration and covered with 5/8" type X gypsum, glued and screwed to structure.	
Replacement Standard	
When frame walls and floors adjoining other dwellings are gutted, new wall finish installations will conform to local requirements for fire ratings.	

Foundations	
Repair Standard	Minimum Life 15 years
Foundations will be repaired to be sound, reasonably level, and free from movement.	
Replacement Standard	
Foundation replacements are beyond the scope of the program.	

Structural Walls	
Repair Standard	Minimum Life 15 years
Structural framing and masonry will be free from visible deterioration, rot, or serious termite damage, and be adequately sized for current loads. Prior to rehab, all sagging floor joists or rafters will be visually inspected, and significant structural damage and its cause will be corrected.	
Replacement Standard	
New structural walls will be minimum 2" x 4", 16" OC. All exterior walls that are part of the building envelope (the air barrier and thermal barrier separating the conditioned space from the non-conditioned space) will be insulated with a minimum R-13 insulation and sheathed/structurally braced according to code.	

Additions or Outbuildings	
Repair Standard	Minimum Life NA
NA	
Replacement Standard	
Minimum Life 60 years	
New additions are acceptable only when – for marketing and livability reasons – it is necessary to add additional bedroom space. Stamped plans must be submitted to the City Building Official for review and approval prior to bidding. All standards for Exterior Building Surfaces, Roofing, Windows and Doors, Insulation and Ventilation, Plumbing, Electrical, HVAC apply.	

HQS & REHABILITATION STANDARDS

Tie Downs	
Repair Standard	Minimum Life 15 years
Tie downs will be repaired to be sound, reasonably level, and free from movement as all manufactured homes not on permanent foundations must have a tiedown system to support the installation against wind loading.	
Replacement Standard	
Tie down replacements are beyond the scope of the program.	

5 - Windows and Doors

Interior Doors	
Repair Standard	Minimum Life 5 years
Baths and occupied bedrooms will have operating doors and lock sets.	
Replacement Standard	
Hollow-core, pressed-wood product consistent with the style of existing doors including a brass-plated bedroom lock set.	

Exterior Doors	
Repair Standard	Minimum Life 5 years
Exterior doors will be solid, weather-stripped and will operate smoothly. They will include a peep site, a dead bolt, and an entrance lock set.	
Replacement Standard	
Replacement doors at the front of the property for historically significant buildings will be historically sensitive. Steel, six-panel doors may be installed at entrances not visible from the front street and on the front of the property for buildings that are not historically significant. Dead bolt locks will be installed on all exterior doors keyed to match. All new doors will be weather-stripped to be air tight.	

Windows	
Repair Standard	Minimum Life NA
All windows will operate, remain in an open position when placed there, lock when closed and the open section will be covered with a screen.	
Replacement Standard	
Windows that are not repairable may be replaced and will meet the current adopted California Energy Code standards for this geographic region. Windows on key façades of historically sensitive properties will be wood of the style original to the building. New windows on other properties may be vinyl and double-glazed.	

Basement Windows	
Repair Standard	Minimum Life 5 years
A minimum of 2 basement windows on opposite sides of the building must be operable for ventilation, in good working order, and lockable.	
Replacement Standard	
Basement windows may be replaced with glass block. If so, a minimum of 2 glass block windows on opposite sides of the building must have operable and lockable center vents.	

6 – Roofing

Flat and Low-Slope Roofing	
Repair Standard	Minimum Life 2 years
Built-up roofing that is leak-free will be re-coated and flashing and accessories repaired if their minimum life is questionable.	
Replacement Standard	
The most cost-effective roof – either 3-ply, hot built-up or EPDM – will be installed.	

Pitched Roofs	
Repair Standard	Minimum Life 5 years
Missing and leaking shingles and flashing will be repaired on otherwise functional roofs. Slate, metal and tile roofs will be repaired when possible. Antennae will be removed.	
Replacement Standard	
No more than 2 layers of asphalt shingles are permitted. Fiberglass, asphalt, 3-tab, class A shingles with a prorated 25-year warranty with a continuous ridge vent will be installed required felt paper with new drip edge on all edges.	

Gutters and Downspouts	
Repair Standard	Minimum Life 5 years
Gutters and downspouts must be in good repair, leak free and collect storm water from all lower roof edges.	
Replacement Standard	
Gutters and downspouts will be installed and collect storm water from all lower roof edges. Concrete splash blocks will be installed to move water away from the foundation. The system must move all storm water away from the building and prevent water from entering the structure. In addition to positive drainage away from the building, outlets will be a minimum of 3 feet away from the foundation when located in a known floodplain, or area subject to flooding.	

7 - Insulation and Ventilation

Infiltration	
Repair Standard	Minimum Life
All homes or units will be tested with a Blower Door and any existing air sealing will be repaired to attain a maximum 0.35 Air Changes per Hour at 50 Pascal pressure (0.35 ACH50).	
Replacement Standard	
All homes or units will be air sealed to meet the minimum Blower Door test requirements of 0.35 Air Changes per Hour at 50 Pascal pressure (0.35 ACH50).	

Insulation	
Repair Standard	Minimum Life NA
NA	
Replacement Standard	Minimum Life 20 years
<p>The envelopes of all homes of units will have a continuous air barrier and a continuous thermal barrier that is in contact with the air barrier. Attic insulation shall be a minimum of R38 with soffit baffles installed when there are soffit vents to maintain ventilation at the eaves. All exterior walls opened in the course of renovations shall be insulated with un-faced fiberglass batts or damp spray cellulose to R13 for 2x4 framing and R19 for 2x6 framing. Whenever financially feasible, 1-inch, foil-faced polyisocyanurate foam board will be added under new siding. Rim joists will be insulated to R19 with either foil-faced foam board or Class 1-rated spray foam. Crawl space walls shall be insulated with 1-inch, foil-faced polyisocyanurate foam board and a 6-mil plastic vapor barrier will be installed continuously over the ground to the sill plate with all seams sealed. The ENERGY STAR Thermal Bypass Inspection Checklist shall be completed for each home.</p> <p>http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/Thermal_Bypass_Inspection_Checklist.pdf</p>	

HQS & REHABILITATION STANDARDS

Whole House Ventilation	
Repair Standard	Minimum Life 5 years
All homes shall meet the most recent ASHRAE 62.2 standard by using one bathroom fan continuously operating at a verified CFM rate sufficient to meet the ASHRAE standard and creating ≤ 0.3 Sones of fan noise. The fan will also have a ≥ 80 CFM boost function switched one of three ways: by a switch at the entrance, with an adjustable time-delay function that runs the fan for an additional period after the switch is turned off; or a motion detector with an adjustable time-delay function that runs the fan for an additional period after the motion detector ceases to see motion; or by a humidistat.	
Replacement Standard	
As stated in the Repair Standard	

Bath Ventilation	
Repair Standard	Minimum Life NA
NA	
Replacement Standard	Minimum Life 10 years
One bathroom must have a bath fan that meets the Whole House Ventilation requirement and also have a ≥ 80 CFM boost function switched one of three ways: by a switch at the entrance, with an adjustable time-delay function that runs the fan for an additional period after the switch is turned off; or a motion detector with an adjustable time-delay function that runs the fan for an additional period after the motion detector ceases to see motion; or by a humidistat. Any additional bathrooms must be mechanically vented to the ≥ 80 CFM standard with the time-delay switching described above.	

Kitchen Ventilation	
Repair Standard	Minimum Life 2 years
All kitchens must have functional mechanical ventilation operating at a minimum 120 CFM.	
Replacement Standard	
All kitchens must have mechanical ventilation operating at a maximum of 20 Sones and producing a minimum of 150 CFM after accounting for ducting losses. All ductwork will be heavy gauge galvanized metal, air tight with mastic-sealed seams (no duct tape). It is preferred that mechanical ventilation exit at side walls and not at the soffit to minimize the potential for ice damming.	

HQS & REHABILITATION STANDARDS

Roof Ventilation	
Repair Standard	Minimum Life 5 years
1 square foot of free venting must be supplied for every SF of area directly under the roof if there is no soffit venting. 1 square foot of free venting must be supplied for every 300 SF of area directly under the roof if 20% of the venting is soffit vent and if the living space ceiling directly below the roof has a rating of one perm or less. (1 perm is achievable with a coating of ICI Dulux Ultra Hide Vapor Barrier paint 1060-1200 per manufacturer’s instructions)	
Replacement Standard	
The venting requirement is the same as with the Repair Standard above with a strong preference for a combination of ridge vents, soffit vents and the one perm-rated ceiling required for the 1 to 300 ratio.	

8 - Interior Standards

Interior Walls and Ceilings	
Repair Standard	Minimum Life 3 years
Holes, cracks and deteriorated and un-keyed plaster will be repaired to match the surrounding surfaces. All visual surfaces will be stabilized to minimize lead paint hazards using premium vinyl acrylic paint.	
Replacement Standard	
When necessary plaster will be replaced by ½” gypsum board. Fire-rated assemblies will be specified on a project-by-project basis as required by local codes.	

Flooring	
Repair Standard	Minimum Life 3 years
Bathroom, kitchen and other water-susceptible floor areas will be covered with water-resistant flooring that is free from tears or tripping hazards. Damaged wood floor will be repaired. When existing deteriorated carpet is installed over hardwood floors, the hardwood will be refinished whenever possible. Basement floors will be continuous concrete at least 1" thick.	
Replacement Standard	
Baths will receive resilient sheet goods over plywood underlayment, and kitchens will receive resilient sheet goods or tile over plywood underlayment. Whenever possible rooms other than kitchens and baths with existing wood flooring will be maintained as wood floors and refinished when appropriate. Rooms other than kitchens or baths without usable wood floors may be finished with carpet and associated products that are Carpet and Rug Institute’s Green Label certified. New basement slabs will be at least 3" thick and have a 6-mil vapor barrier.	

HQS & REHABILITATION STANDARDS

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

Kitchen Cabinets and Countertop	
Repair Standard	Minimum Life 3 years
Kitchens will have a minimum of 10 feet of countertop with base and wall cabinets (or dishwasher) to match. Existing cabinets with hardwood doors and face frames may be repaired if in good condition. All cabinets will be sound and cleanable.	
Replacement Standard	
New kitchen cabinets will meet the ANSI A208.1 and A208.2 standard for formaldehyde content of particleboard and MDF, or have exposed edges of particleboard and MDF sealed to prevent the out-gassing of formaldehyde. Cabinets will have hardwood doors and face frames. There will be a minimum of 10 lineal feet of post-formed countertop with corresponding base cabinets and wall cabinets, and a dishwasher. Corners in countertop designs are permitted if factory assembled. A drawer base (12" or 15") will be included in new cabinetry. A plastic laminate panel to match the countertop will be installed as a base cabinet to wall cabinet backsplash behind the range and extending 6 inches past the range on both sides, or if the range is in a corner along the side wall and trimmed with chrome metal edging.	

9 – Electric

Ground Fault Interrupter Circuits	
Repair Standard	Minimum Life 5 years
Non-functioning GFCIs will be replaced.	
Replacement Standard	
All kitchen counter, bathroom and laundry receptacles will be replaced with a GFCI-protected receptacle or protected by a GFCI device.	

HQS & REHABILITATION STANDARDS

Passage Lighting	
Repair Standard	Minimum Life 7 years
All lights and switches in hallways, stairs and other passages will be operable and safe. Existing fixtures with incandescent lamp fittings will have minimum 7W CFL replacement lamps installed.	
Replacement Standard	
All halls, stairs and rooms necessary to cross to other rooms and stairways must be well lit and controlled by a 3-way switch using concealed wiring. Attics, basements and crawl spaces must have utility fixtures. All new light fixtures will be ENERGY STAR labeled.	

Kitchen Electric Distribution	
Repair Standard	Minimum Life 5 years
Existing receptacles, fixtures and switches will be safe and grounded.	
Replacement Standard	
Permanently installed or proposed stoves, refrigerators, freezers, dishwashers and disposals, washers and dryers will have separate circuits sized to N.E.C. Two separate 20-amp counter circuits are required with each kitchen area.	

Interior Electric Distribution	
Repair Standard	Minimum Life 7 years
Exposed knob and tube will be replaced. Every room will have a minimum of two duplex receptacles, placed on separate walls and one light fixture or receptacle switched at each room entrance. Where the source wiring circuit is accessible (e.g., first floor above basements, in gutted rooms, etc.), receptacles will be grounded. All switch, receptacle, and junction boxes will have appropriate cover plates. Wiring will be free from hazard, and all circuits will be properly protected at the panel. Floor receptacles will be removed and a metal cover plate installed. Exposed conduit listed for the installed location is allowed. All kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, and similar rooms shall be protected by an Arc Fault breaker. There must be one electrical receptacle at the service panel. Basements will have a minimum of 3 keyless bare bulb fixtures switched at the top of the stairs.	
Replacement Standard	
When a room's wall finishes are removed, it will be rewired to the latest version of the National Electric Code.	

Service and Panel	
Repair Standard	Minimum Life 10 years
Distribution panels will have a main disconnect, at least 10 circuit-breaker-protected circuits, a 100-amp minimum capacity and be adequate to safely supply existing and proposed devices. If a working central air conditioning system is present, the minimum service will be 150 amp.	
Replacement Standard	
200-amp service with a main disconnect panel containing at least 30 circuit breaker positions.	

10 - Plumbing System

Drain, Waste, Vent Lines	
Repair Standard	Minimum Life 1 year
Waste and vent lines must function without losing the trap seal.	
Replacement Standard	
When walls are removed exposing vent and waste lines those lines will be reworked to the current mechanical code.	

Plumbing Fixtures	
Repair Standard	Minimum Life 3 years
All fixtures and faucets will have working, drip-free components. Toilets with greater than a 1.6 GPF rating will be replaced with a maximum 1.3 GPF model.	
Replacement Standard	
Single lever, metal faucets and shower diverters with 15-year, drip-free warranty and maximum 2.0 GPM flow. White ceramic low-flow toilets (1.3 Gal), double bowl stainless steel sinks, and fiberglass tubs with surrounds.	

Plumbing Minimum Equipment	
Repair Standard	Minimum Life 3 years
Existing equipment will be repaired to conform to the Housing Quality Standards.	
Replacement Standard	
Every dwelling unit will have a minimum of one single bowl sink with hot and cold running water in the kitchen and at least one bathroom containing a vanity with a sink, and a shower/tub unit, both with hot and cold running water, and a toilet. Redesigned kitchens will include an ENERGY STAR-labeled dishwasher.	
http://www.hudnshelp.info/media/resources/GuidanceonNSPEligibleAppliancePurchases.pdf	

HQS & REHABILITATION STANDARDS

Water Heaters	
Repair Standard	Minimum Life 7 years
Each housing unit will have a working water heater less than 3 years old with a minimum capacity of 40 gallons if it is gas-fired. Gas water heaters more than 3 years old may be repaired if it is clear that a repair will make it operable. All electric water heaters will be replaced with a gas-fired model.	
Replacement Standard	
All units will have a minimum 40-gallon, gas-fired water heater with a 10-year warranty installed to the current edition of the California Mechanical Code.	

Water Supply	
Repair Standard	Minimum Life 10 years
The main shut off valve must be operable and completely stop the flow of water to the house. All fixtures must be leak-free and deliver sufficient cold water and, where applicable, hot water (such as, but not limited, to the kitchen sink, lavatory).	
Replacement Standard	
The main shut off valve must be operable and completely stop the flow of water to the house, and should be replaced if it does not. Lead and galvanized pipe that is part of the water service or the distribution system will be replaced with copper. All fixtures will have brass shut off valves. One freeze-protected exterior hose bib is required.	

11 – HVAC

Air Conditioning	
Repair Standard	Minimum Life - NA
Non-functioning, non-repairable air conditioners will be removed and drained of all CFCs. Existing central air conditioning will be inspected, serviced and refurbished to operate safely.	
Replacement Standard	
Minimum Life 20 years	
New HVAC systems will have a rough-in installed for air conditioning (\geq 13 SEER)	

HQS & REHABILITATION STANDARDS

Chimney Repair	
Repair Standard	Minimum Life NA
Unused chimneys will be removed to below the roof line wherever roofing is replaced. Unsound chimneys will be repaired or removed. When chimneys must be used for combustion ventilation, they will be relined.	
Replacement Standard	Minimum Life NA
The creation of new flues is not recommended in this program. The use of high efficiency closed combustion appliances is recommended to avoid the need for new flues. Replacement furnace flues, when required, will be metal double- or triple-walled as recommended by the furnace manufacturer.	

Distribution System	
Repair Standard	Minimum Life 5 years
Duct work and radiator piping will be well supported, insulated in unconditioned space and adequate to maintain 68°F measured 36" off the floor when the outside temperature is the average yearly minimum, in all habitable and essential rooms. All duct work will be insulated to R-7, sealed at all seams with mastic (not tape) and pressure tested to eliminate leakage.	
Replacement Standard	Minimum Life 25 years
All duct work will be insulated to R-7, sealed at all seams with mastic (not tape), pressure tested to eliminate leakage and run within a concealed chase of spaces.	

Heating System	
Repair Standard	Minimum Life 5 years
Workable existing heating systems will be inspected and serviced to operate in a safe manner. Regardless of condition, resistance electric heating systems will be removed and replaced with systems as described below, unless the home has either a very low heating load to super-insulation, solar gain or a mild climate.	
Replacement Standard	Minimum Life 25 years
Gas-fired heating plants will be rated at $\geq 92\%$ AFUE or better. Oil-fired furnaces will be rated at $> 83\%$ AFUE or better. Oil-fired boilers will be rated at $> 85\%$ AFUE or better. Heat pumps will be rated at ≥ 15 SEER. Setback thermostats are required. When electric resistance heating systems are replaced, soffits for ductwork and/or new distribution pipes for hot water heating systems will be provided. Up to 4 lineal feet of resistance electric heating strips per 1000 square feet of floor area may be retained or installed in areas that are not cost effective to heat via ductwork or hot water distribution systems.	

12 – Appliances

Kitchen Appliances	
Repair Standard	Minimum Life 3 years
All units will have a working and cleanable range. If there is an existing dishwasher in working and cleanable condition, it may be retained with minor repairs.	
Replacement Standard	Minimum Life 15 years
All redesigned kitchens will have ENERGY STAR-labeled appliances where applicable. All new cooking ranges will be electric.	

13 – Disaster Mitigation

The City of Moreno Valley does not award funding to projects located within the 100-year Floodplain nor to projects involving “critical actions” in the 500-year Floodplain zone. Additionally, the City is not located in an area where hurricanes, tornadoes, etc. are prevalent. The California Residential Code does require flood, wind, and seismic loads to be addressed.

Summary

The City of Moreno Valley Housing Quality Standards, in conjunction with Housing and Urban Department Housing Quality Standards, municipal laws and model building codes are designed and intended to establish guidelines for ensuring safe, sanitary and habitable housing.

Housing that fail to meet these minimum standards would not qualify in any CDBG, HOME or other HUD funded Housing Programs.