

Exhibit D
Arizona Department of Housing (ADOH) Year 2014
Mandatory Design Standards for Multifamily Rental Housing

The following Design Guidelines have been developed to assist architects and developers to understand the factors considered by the Arizona Department of Housing (“ADOH”) in the evaluation of multifamily rental housing. ADOH generally yields to the local jurisdiction in all matters pertaining to development and construction standards. Therefore, in the event that Local Government building codes and standards are more restrictive than these Design Guidelines; the Local Government codes and standards shall apply. ADOH requires the finished product to substantially conform to what was represented in the Application. This representation pertains to buildings, building materials, amenities, equipment, etc. ADOH must approve any Material Change or it may result in a reduction or recapture of tax credits and/or, prevent the issuance of 8609’s until the Material Change is approved.

ADOH values excellence in design because well-designed housing meets the needs of tenants, attracts market renters and promotes community acceptance of housing financed by ADOH. All Projects must meet or exceed each of these standards, as well as the minimum requirements of all applicable building codes and regulations. In addition, Projects must meet all applicable state and federal laws including without limitation the Americans with Disabilities Act (“ADA”), Architectural Barriers Act of 1968, the State and Federal Fair Housing Acts of 1990, and Section 504 of the Rehabilitation Act of 1973 (collectively “Applicable State and Federal Law”).

Where ADOH’s minimum standards are in conflict with HUD or State Housing Fund requirements for the design and construction of manufactured housing, the HUD or State Housing Fund requirements shall apply. For items not covered by the HUD or State Housing Fund requirements, e.g., site drainage and site lighting, ADOH’s minimum standards shall apply.

I. GENERAL DESIGN

- A. The building design should be appropriate and integrated into the topography and neighborhood.
- B. Project amenities should reflect the desires of the target market. Amenities should be shown clearly on the plans and should be fully described within the narrative portion of the application package.
- C. Project design should reflect the outcomes of neighborhood involvement.

II. BUILDING CODE STANDARDS

All Projects financed and built under the program are to meet or exceed the most recent local building codes and the following development standards:

- A. Federal Fair Housing Act (42 U.S.C. § 3601 *et seq.*), *Arizona Fair Housing Act* (A.R.S. § 41-1491 to 41-1491.37), and the HUD Fair Housing Regulations (24 C.F.R. Part 100, Subpart D)

- B. Uniform Federal Accessibility Standards (Section 504 of the 1973 Rehabilitation Act) and the Americans with Disabilities Act, as applicable.

III. SITE, LOCATION AND NEIGHBORHOOD

A. Smart Site Location – Protecting Environmental Resources.

New construction shall not be located within 100 feet of wetlands, critical slope areas, land identified as habitat for threatened or endangered species, land previously used as public park land, land identified as prime farmland, or land with elevation at or below a designated 100-year floodplain.

B. Walkable Neighborhoods – Sidewalks and Pathways.

Site plans shall demonstrate that the Project is connected to the pedestrian grid. Site plans shall describe sidewalks or other all-weather pathways within a multifamily property linking residential development to public spaces, open spaces and adjacent development. Sidewalks shall meet local, State and Federal accessibility guidelines.

C. Environmental Remediation.

Project sponsors shall conduct a Phase I Environmental Site Assessment and provide a plan for abatement if necessary.

D. Erosion and Sedimentation Control.

Project plans and specifications shall implement EPA’s Best Management Practices for erosion and sedimentation control during construction and refer to EPA documents for Storm Water Management for Construction Activities.

E. Landscaping.

Landscape design shall be low water use. It shall provide for human enjoyment and comfort, including shading in the summer and allow for appropriate heat gain in the winter.

IV. INTERIOR DESIGN

All residential dwelling units must meet minimum size requirements. The net square footage measurements below will be for conditioned square footage only. The measurements are taken from finished interior wall to finished interior wall. Unconditioned areas such as patios, decks, porches, stoops, or storage rooms shall not be included.

<u>Unit Size</u>	<u>Minimum Square Footage</u>
Efficiency	450 net square feet
1 bedroom	650 net square feet
2 bedrooms	800 net square feet
3 bedrooms	1,050 net square feet
4 bedrooms	1,200 net square feet
5 bedrooms	1,350 net square feet

- A. The minimum bedroom size is 120 net square feet.
- B. Kitchens must be equipped with pantries.
- C. Other features which must be provided include:

1. Linen closets or cabinet.
2. General storage for items such as, suitcases and sport equipment. (This may be an interior guest closet or located outside each unit, and shall not be shared with a water heater.)

V. EXTERIOR DESIGN

- A. Building design shall incorporate durable low maintenance exteriors that are appropriate to the climate and surrounding areas.
- B. Plans shall include a complete landscape plan, designed by a licensed landscape architect which maximizes existing natural features or otherwise enhances open space. Wherever possible native plants should be used. Landscape plans shall also detail the systems (e.g. sprinkler and irrigation systems, maintenance, etc) necessary to maintain the landscaping.
- C. In areas that are susceptible to drought, which includes most of the State of Arizona, Xeriscaping must be used. Internally located lawn areas of minimal size are permitted for specific uses.
- D. Trash removal areas must be screened.
- E. Buildings and dwelling units must be individually marked with visible, contrasting, identifying devices as required by local police, fire and other emergency services to minimize their response time. The building identifying devices must be appropriately lit from dusk till dawn, while observing dark sky lighting strategies.
- F. Single lever deadbolts and eye viewers are required on all entry doors to residential units.

VI. LARGE UNIT DESIGN (applicable to units which have three or more bedrooms)

- A. The areas of common spaces of units, living area, kitchen, dining, etc., shall increase in proportion to the number of bedrooms.
- B. Three-bedroom units must have at least 1.75 baths. Four and five-bedroom units must have 2 full baths.

VII. ON-SITE PLAYGROUND AREAS

- A. Recreational facilities must be provided for different age group. For example, sandboxes within sight of units for children under 5, "tot lots" for ages 5 to 12, and a sport court, pool, or area in the clubhouse for ages 12 and older.
- B. Play areas and playgrounds for children should be located away from areas with high volume automobile traffic, and situated so that the play area is visible from the maximum number of dwelling units possible for safety.
- C. Designated play areas and playgrounds are considered "common areas", and must be on an accessible route in accordance with applicable accessibility codes.

- D. A bench must be provided at playgrounds to allow a child's supervisor to sit and rest comfortably. All benches must be anchored permanently, must be on an accessible route, must be weather resistant, and must have a back.
- E. A "warning" sign must be posted to advise residents and guests that using the playground is at their own risk. The sign must be posted at a visible location, and use contrasting colors for better visibility.

VIII. COMMON AREA FACILITIES

A. On-Site Laundry Facilities.

There must be a minimum of one washer and one dryer per twelve dwelling units if washer/dryer hookups are not available in each dwelling unit. If hookups are available in each dwelling unit, there must be a minimum of one washer and one dryer per twenty dwelling units. If in addition to washer/dryer hookups, Applicant provides washers and dryers in each unit, a common washer and dryer facility is not required.

1. A "folding" table or countertop must be installed in common laundry facilities.
2. The laundry room must have an interior or exterior window and adequate entrance lighting, which must be on from dusk to dawn to assist in greater security during evening hours.

B. Community/Office Space.

All special needs and elderly developments must have a community room on site or immediate access to such space on an adjacent property.

All developments consisting of twenty (20) residential dwelling units or more must have a site office of at least 200 square feet (inclusive of handicapped toilet facility) and a maintenance room of at least 100 square feet.

C. Community Service Facility.

A Community Service Facility must be designed to serve primarily individuals whose income is 60 percent or less of AMGI, under Section 42(d)(4)(c)(iii). This requirement will be satisfied if the following conditions are met:

1. Facility must be used to provide services that will improve the quality of life for community residents.
2. Applicant must demonstrate that the services provided at the facility will be appropriate and helpful to individuals in the area of the Project whose income is 60 percent or less of AMGI. This may, for example, be demonstrated in the market study required to be conducted under section 42(m)(1)(A)(iii), or another similar study.
3. Facility must be located on the same tract of land as one of the buildings that comprise the qualified low-income housing project, and can be incorporated into the common building space, or be a separate stand alone building.
4. If fees are charged for services provided, they must be affordable to individuals whose income is 60 percent or less of area median income.

IX. NEW CONSTRUCTION

Specific Construction Features

The following represent minimum design standards to be met by each tax credit project. These minimum requirements (or alternatives of equal or greater quality and durability) will be imposed on every Applicant, regardless of Project size, amenities, or geographic location, unless the standards required by a local jurisdiction exceed those established by ADOH. For Rehabilitation Projects, the minimum design standards listed in this section shall apply to any part of the building that is modified where the design standard specifications can be met.

The Applicant will be required to certify in the Applicant Affidavit, Release and Oath (see Form 3, "Low-Income Housing Tax Credit Application") that the Applicant will comply with these minimum design features in the construction of the Project and that, if they are not, credits will be surrendered to ADOH. ADOH will not release 8609's until the Project sponsor demonstrates compliance with these Design Guidelines. The Applicant will also be required to certify full compliance with these Design Guidelines prior to issuance of IRS Forms 8609.

A specific goal of the program is to minimize monthly tenant Operating Costs. All construction features in the LIHTC Project should conform to goals of attractiveness, utility, efficiency, and long-term durability. All features should be designed for long-term extended use (50-year minimum).

Building design should minimize visual impacts and apparent height through varied building heights and rooflines and distinctive window and entry door detail. The architect should vary building orientations along the street as well as building masses, clusters, finishes and colors.

A. Site Work.

1. Storm Water Pollution Prevention Plans where required.
2. Applicant must adhere to County Pollution Control Standards.
3. A geotechnical investigation report by an Arizona Registered Engineer is required.
4. Site drainage must conform to the recommendations of the geotechnical investigation report or the following minimum slopes whichever is more restrictive:
5. Minimum slopes required for proper drainage are:
 - a. Slopes away from foundations: 5% first 10 feet (6 inches in first 10 feet).
 - b. Slopes on paved areas: can be a minimum of 0.7% for asphalt, 0.5% if a concrete valley gutter is installed; 1% = 1/8 inch per foot.
 - c. Exterior grade should be shown a minimum of 6-8 inches below the top of slabs on grade.

B. Foundation and Slabs.

1. A Soils report by an Arizona Registered Engineer is required.
2. Cast-in-place concrete foundations shall be suited to specific locations, be designed for local frost depth, and be designed by a registered professional engineer.
3. If a slab on grade is implemented a concrete slab with minimum of four inches thickness shall be supported by at least four inches of ABC aggregate, or as designed by an Arizona Registered Structural Engineer. Four inch concrete slabs, including carports and driveways,

should be reinforced when directed by the geotechnical investigations report using the following methods or equivalent:

- a. 6x6 10/10 WWF wire mesh, centered in the slab vertically, or
- b. Polypropylene fibers in the concrete mix for slabs (Fibermesh is a typical manufacturer). Application of the product should be in the proportions and according to the recommendations of the manufacturer, or
- c. Post-tensioned tendons as designed by an Arizona Registered Structural Engineer following the additional recommendations of a Geotechnical Investigations Report of the soil conditions by an Arizona Registered Geotechnical Engineer.

Note: All slabs and foundations must be designed by an Arizona Registered Structural Engineer.

C. Frame Construction.

1. Frame: a minimum of 2x4 wood or metal studs in exterior and party walls, 2x4 in other walls; the framing system will be dictated by the methods selected to meet the International Energy Conservation Code requirements, sound barrier requirements, and engineer's specifications. Exterior walls should be designed to achieve a thermal resistant value per local code or better.
2. Wood floor framing between units must provide a minimum fire rated separation of one hour and minimum STC of 50 and a minimum IIC of 50.

D. Roof.

1. An Arizona Registered Structural Engineer must design roof trusses.
2. Roof Sheathing should be called out on the Roof Framing Plan. Required: minimum ½-inch exterior grade plywood or ½-inch exterior grade OSB (oriented strand board). All sheathing must be gapped 1/8-inch on the edges and ends with metal clips appropriately installed on the trusses.
 - a. Pitched Roof
Roofing systems must have a minimum life of 30 years, a 10-year warranty, and be installed per manufacturer's specifications with wood truss framing, and a minimum slope of 3:12.
 - b. Flat Roof
Flat roofs must have a minimum 3/8"/1' slope and have a minimum rated life of 20 years and a 10-year warranty.

E. Electrical.

1. All standard basic service and lighting must conform to the current edition of the National Electric Code and other local codes. Smoke detectors must be hard-wired.
2. Install Energy Star qualified light fixtures in all interior units and use Energy Star or higher efficiency commercial grade fixtures in all common areas and outdoors.

F. Plumbing.

1. Provide copper, CPVC or PEX for domestic water, PVC outside and/or ABS plastic or cast iron for drain-waste-vent piping for sanitary sewer piping (polybutylene piping is prohibited).

2. Durable fixtures: Materials must be as follows:

Fixture	Material
Bathroom sinks	porcelain
Toilets	vitreous china
Tubs/Shower	porcelain on steel, one piece epoxy resin with surround (fiberglass) four piece acrylic tub surround
Surrounds	ceramic tile, cultured marble, pre-finished wall panels

Mandatory water conservation devices shall include the following maximum flow rates:

Fixture	Maximum Flow Rate
Toilets	1.28 GPF
Showerheads	2.0 GPM
Kitchen faucets	2.5 GPM
Bathroom faucets	1.5 GPM

3. All clothes washers must be front loading or horizontal axis.
4. No plumbing shall be permitted directly in exterior framed walls in cold climates where the exterior temperature goes below 32° F.
5. Hot water heaters must be tankless or conventional hot water heaters located in rooms with drains or catch pans with drains piped to the exterior of the dwelling.

G. Energy Conservation.

The Project must comply with the latest local energy code. Compliance with this code shall be determined in accordance with applicable Sections of the local code.

1. **Insulation:**

Insulation must be installed such so that there are no gaps, voids, wind intrusion or compression of the insulation. The insulation and the air barrier (e.g. gypsum board) must be continuous and aligned in all cases. Sound insulation is required in demising walls to establish a minimum STC of 50.

2. **Minimum HVAC efficiencies by Energy Code:**

- a. AC: 13 SEER
- b. Heat Pump: 13 SEER and 7 HSPF
- c. Combustion furnace: 80% AFUE
- d. Size heating and cooling equipment in accordance with the Air Conditioning Contractors of America Manual, Parts J and S, ASHRAE handbooks, or equivalent software.

Note: Electric resistance heating can be used only if the Owner documents, in accordance with IECC Section R405 Simulated Performance Alternative approach, that the utility costs for the structure are equal to or less than the IECC standards design of like architectural characteristics. The analysis will be completed utilizing a combustion furnace for the standard design with an efficiency value of 80% AFUE.

3. **Air Distribution Systems:**

- a. All joints in the air distribution system shall be sealed with duct mastic or approved equivalent to comply with IRC or IMC.

- b. For duct systems located outside the conditioned envelope, leakage to outdoors shall be less than or equal to 2 CFM per 100 ft² of conditioned floor area (CFA) or a total leakage less than or equal to 4 CFM per 100 ft² of CFA when tested at a pressure differential of 25 Pa across the entire system, including the manufacturer's air handler enclosure. If the air handler is not installed, leakage to outdoors shall be less than or equal to 1 CFM per 100 ft² of CFA or a total leakage less than or equal to 3 CFM per 100 ft² of CFA.
 - c. If the entire system, including the manufacturer's air handler enclosure, is located entirely within the building thermal envelope, duct leakage testing is not required.
 - d. Airflow to each room will match design airflow calculations to within +/- 10%.
4. **Room Pressure:**
Under normal operating conditions, an air handler cannot create a differential pressure greater than +/- 3.0 Pascals between room and any area outside the room, anywhere in the Unit.
5. **Indoor Air Quality:**
- a. Exhaust hoods above ranges must be vented to the outside. Install power vented fans or range hoods that exhaust to exterior.
 - b. Install Energy Star – labeled bathroom fans that exhaust to the outdoors and are connected to a switch or timer.
 - c. Clothes dryers must exhaust directly to the outdoors.
 - d. Unvented combustion appliances (fireplaces, heaters or gas logs) are not allowed.
 - e. A carbon monoxide detector, hardwired, shall be installed in all Units with an attached garage or with any combustion appliance located in the conditioned space.
 - f. Applicant must install a vent system for the dwelling unit, providing adequate fresh air per ASHRAE 62.1-2007 for buildings over three stories, or ASHRAE 62.2 for single family and low rise multi-family.
 - g. All particleboard and MDF must be certified compliant with ANSI A208.1-2009 Particleboard and ANSI A208.2 -2009 NDF for Interior Applications. All adhesives shall comply with Rule 1168 of the South Coast Air Quality Management District. Caulks and sealants must comply with Regulation 8, Rule 51 of the Bay Area Air Quality Management District.
 - h. All interior paints and primers must comply with current Green Seal standards for low VOC limits.
6. **Inspections of Energy Conservation Features - Contact Les Woody (602) 771-1140.**

The Developer is required to provide to the Governor's Office of Energy Policy (GOEP) a PDF of the mechanical plans for the Project and to notify GOEP of the construction schedule to facilitate inspections that need to be completed at various phases of construction.

The following inspections and testing must be completed. The Developer may use a Certified Residential Energy Services Network (RESNET) Home Energy Rater to perform inspections and testing in lieu of requesting them from the GOEP. The Certified RESNET Home Energy Rater must submit evidence documenting that the Project passed the inspections to the GOEP. The GOEP or Certified RESNET Home Energy Rater will inspect the Project for adherence to the GOEP Energy Standards listed below.

PLEASE NOTE: If requesting inspections from the GOEP, the GOEP will require 10-days' notice prior to scheduling inspections and confirmation that the construction superintendent is available to accompany the GOEP representative throughout the entire inspection.

Inspections will include:

1. ADOH requires a minimum of 10% of units be randomly selected for testing and inspections.
2. Pre-Insulation/Drywall Phase:
 - a. The building's air/pressure barrier shall be continuous and unbroken at all walls separating conditioned from unconditioned space;
 - b. All insulation shall be in full contact with the air/pressure barrier, minimizing gaps, voids, compression, misalignment, and wind intrusion;
 - c. If duct leakage is measured pre-drywall, leakage shall be measured in accordance with Section G3 (Air Distribution Systems) above;
 - d. Verify windows have a low-e coating.
3. Final Inspection:
 - a. Measured envelope leakage shall be less than or equal to 1 CFM50 per ft² of CFA;
 - b. Duct leakage:
 - i. If duct leakage is measured at final inspection, leakage shall be measured in accordance with Section G3 (Air Distribution Systems) above;
 - ii. Alternatively, the AEO may test for duct leakage using the pressure pan testing method, with each supply/return testing at or below 1.0 pascal;
 - c. Each bedroom shall be tested to confirm that room pressures, with respect to the main body of the unit, is at or below 3.0 pascals;
 - d. Verify CO detector is installed (if applicable);
 - e. Verify that HVAC equipment meets ADOH standards: minimum 13 SEER (if heat pump, minimum 13 SEER and 7 HSPF); furnace 80 AFUE.

When all tests and inspections have passed, an inspection report will be sent to ADOH indicating that all criteria for the energy standards by Governor's Office of Energy Policy have met.

H. Doors.

1. Exterior: Solid wood, fiberglass or insulated metal outside doors with wood or metal frame.
2. Interior: Paint grade pre-hung hollow-core interior doors with residential grade finish hardware or better with lever handles throughout.

I. Floors.

1. Surface must be carpet, VCT, sheet vinyl, sealed or stained concrete, or better .
2. Floor base must be painted wood, vinyl, rubber or MDF compressed wood.
3. In wet areas, use materials that have smooth, durable, cleanable surfaces. Do not use mold-propagating materials such as vinyl, wallpaper, or unsealed grout.
4. All carpets are Green Label Plus ("Green Label Plus") certified by the Carpet and Rug Institute.
5. Water resistant floor coverings under hot water heaters.

J. Walls & Ceilings.

1. Painted with low-VOC paint coatings as defined by Green Seal or similar 5/8" gypsum board; moisture resistant at wet areas; type 'X' or "C" at areas required by prevailing building code.

K. **Appliances.**

1. Range/oven, microwave with carbon filter, exhaust hood above range, refrigerator, disposal, dishwasher.
2. All Appliances where applicable shall be Energy Star (e.g. clothes washers, dishwashers and refrigerators).

L. **Cabinets.**

1. Solid wood or particleboard with durable laminate; durable laminate counter tops at a minimum.

M. **Exterior Stairs, Entrance Landings, and Balconies.**

1. Minimum precast concrete or cast in place treads on painted steel framing with painted steel handrails or a system of equivalent or greater durability and quality.

N. **Landscape/Irrigation.**

1. If irrigation is necessary, use recycled gray water, roof water, collected site run-off, water from a municipal recycled water system, or a highly efficient irrigation system including all of the following: system designed by licensed landscape or irrigation professional; plant beds with a drip irrigation system; separately zoned turf and bedding types; a watering zone timer/controller; and moisture sense controller.

O. **Exterior Fencing.**

1. Fence the property (masonry preferred) to limit access of non-residents, as appropriate and required by the Local Government. Gates are not required unless specified by the Local Government or needed to provide access from one property to the other for services, etc.

P. **Exterior Finish.**

1. Select a finish material that will withstand extended weathering in the Project location.
 - a. Desert and mountain localities: at a minimum three-coat cement stucco with metal expansion joints, or 3/8 inch, fiber-reinforced stucco on wire lath, on 1-inch foam insulation.
 - b. Mountain localities at higher elevations; various siding products (cementitious board or vinyl) may be substituted for stucco if warranted by the manufacturer for a minimum of 30 years.

Q. **Site Lights.**

1. For security purposes, provide adequate site lighting, especially at the rear of the buildings and for walkways, parking, corridors and stairways. Adhere to dark sky design strategies.
2. Install daylight sensors or timers on all outdoor lighting.

R. **Bathrooms.**

1. Tiled tub and shower wall areas require a cementitious wall board.
2. Durable toilet accessories must include a medicine cabinet with a mirror and towel bar.

X. **SENSORY IMPAIRED UNITS.**

In the event that federal funds are provided to a Project by ADOH, the following standards apply with respect to section 504 of the Rehabilitation Act of 1974 for the two percent of units that must be equipped

for the sensory impaired. These standards exceed the Uniform Accessibility Standards cited in Section 504.

- A. Lighted switches for garbage disposal, range fan, and bathroom fan.
- B. Construction materials and techniques that minimize vibration and improve sound control.
- C. Open sightlines in community rooms, meeting areas, landings, stairwells, and other building areas to remove visual communication barriers.
- D. Specialized lighting design and window placement that minimizes glare in order to facilitate communication in American Sign Language. Light fixtures are selected for their glare reducing design and located differently to minimize glare that can interfere with seeing hand motions or reading lips. Windows on the west and south facing walls that receive the most direct sunlight are sized and spaced differently. Exterior awnings help prevent glare and background colors are chosen to provide contrast to aid communication in sign language.
- E. Loop amplification system in the community room and the management office designed for tenants with hearing aids. Loop systems that work together with hearing aids to help hard of hearing people hear better, especially in group settings. For example, a loop system could help a hard of hearing individual clearly hear a speaker giving a presentation to a large group. Installation of a loop system involves additional wiring inside building walls. Visual emergency indicators in elevator. Emergency situations are made more stressful by a lack of information and the absence of any indication that help is on the way. The elevators modified to provide information to deaf individuals trapped in a malfunctioning elevator. Lighted buttons can be pressed from outside the elevator to signal to those inside that assistance is on the way. The interior emergency button triggers a visible response to indicate that a request for assistance has been received.
- F. Wider hallways and larger community rooms and elevator lobbies. Spacing requirements between individuals are greater when communicating in American Sign Language as compared with speaking.
- G. Community Room furnishings that are designed and functional for deaf persons. Tables, for example, are rounded rather than rectangular to allow all persons seated at the table to see each other more easily during conversations. Accessibility features for residents with mobility impairments and physical disabilities are located throughout the building. Handrails are located on both sides of common hallways, automatic door openers have been installed at main entrances to the building, and washers and dryers are front loading. In addition, five units meet the Uniform Federal Accessibility Standards (UFAS) for persons with mobility disabilities which exceed the new construction housing requirement of 5%.

XI. REHABILITATION PROJECTS

Applications must propose a scope of work appropriate to the building(s), as reflected in the Capital Needs Assessment. Proposals must address the following elements:

All Additions, Alterations or Renovations shall comply with latest local building and energy code.

Applicant shall provide a 10% unit sampling by an independent Building Performance Institute certified professional to determine the scope of work for energy improvements.

New materials/equipment shall comply with Section IX – Construction.

- A. HVAC replacements and new installations shall include:
 - 1. Sealing of all accessible duct connections including the drywall to boot connections with duct mastic or approved equivalent.
 - 2. Installation of new duct systems that comply with the new construction Energy Conservation Air Distribution Systems standard.
 - 3. Room Pressures shall comply with the new construction Energy Conservations standard.
- B. Insulation:
 - 1. Insulation must be installed such that there are no gaps, voids, compression or wind intrusion of the insulation. The insulation and air barrier (e.g. gypsum board) must be continuous and aligned in all cases.
- C. Common areas must be handicap accessible.
- D. Upgrade site and exterior dwelling lighting, landscaping/fencing and installed finish material must withstand extended weathering (minimum 10 year performance) in the Project's location.
- E. Porches or other aesthetic features must be used to enhance the exterior quality and interest of the Project.
- F. Perform an energy analysis of existing building condition, estimate costs of improvements, and implement measures that will improve building energy performance by a minimum of 15 percent from pre-renovation figures. The analysis must be performed on a minimum 10% unit sampling. The sampling must include all unit sizes. A participating contractor in the Arizona Home Performance with Energy Star Program must perform the analysis.
- G. Where applicable, use energy-efficient related products to replace inferior ones, including insulated windows and doors, and adding additional insulation.
- H. Improve heating and cooling units, plumbing fixtures, water heaters, toilets, sinks, faucets and tub/shower units, especially with use of water conserving equipment and systems.
- I. Improve quality of interior conditions and fixtures, including carpet, vinyl, interior doors, painting, drywall repairs, cabinets, appliances, light fixtures and mini-blinds.
- J. Upgrade bathrooms and kitchens. Refer to Section IX – New Construction – for all categories that apply.
- K. For properties built before 1978, use lead-safe work practices during renovation, remodeling, painting and demolition.
- L. Complete a Phase I Environmental Assessment, Hazardous Materials Study (asbestos and lead paint) for projects built before 1980.

XII. HOUSING FOR SENIORS

Projects that are intended to serve 80% or more senior individuals (persons that are 55 years of age or older) must consist of single story buildings or multi-level buildings with elevators serving all levels of the building.

XIII. CONSTRUCTION WASTE

Develop and implement a construction waste management plan to reduce the amount of materials to less than 3 lbs per square foot of conditioned space sent to the landfill.