

# ARKANSAS DEVELOPMENT FINANCE AUTHORITY

## MULTI-FAMILY HOUSING MINIMUM DESIGN STANDARDS

The following outline of minimum standards must be used in designing Multi-Family developments receiving low-income housing tax credits.

**Any deviation from these standards must receive prior written approval from the Arkansas Development Finance Authority. In addition to these minimum standards, all developments must be designed in accordance with all federal and state accessibility requirements, Fair Housing requirements, and any applicable local, state and national building codes.**

### **I. Site Selection Criteria:**

Any development site proposed within the 100-year flood plain. The community where located must be currently participating in the National Flood Insurance Program. Flood Insurance must be obtained and maintained throughout the affordability period. Any part of the site that will undergo development, i.e., residential buildings, community buildings, playgrounds, swimming pools, recreational areas, sidewalks and parking areas, must be raised to level no less than one (1) foot about the flood plain level.

### **II. Drawing Submission Criteria:**

The following documents shall be prepared by a registered architect or engineer licensed to practice in the State of Arkansas.

#### **A. Site Plan:** The following items must be shown.

1. Scale: 1 inch = 40 feet or larger for typical units.
2. North arrow.
3. Locations of existing buildings, utilities, roadways, parking areas if applicable.
4. Existing site/zoning restrictions including setbacks, rights of ways, boundary lines, wetlands, and flood plain.
5. All proposed changes and proposed buildings, parking, utilities, and landscaping.
6. Existing and proposed topography of site.
7. Finished floor height elevations and all new paving dimensions and elevations.
8. Identification of all specialty apartment units, including, but not limited to, designated handicapped accessible and sensory impaired apartment units.
9. Site accessibility design requirements.

#### **B. Floor Plans:**

1. Scale: ¼ inch = 1 foot or larger for typical units.
2. For developments requiring renovation and/or demolition of existing structures, show proposed changes to building components and design, identifying removal and new construction methods.
3. Show room/space layout, identifying each room/space with name and finished space size.
4. Indicate the total gross square foot size, and the net square foot size for each typical unit.
5. For developments involving removal of asbestos and/or lead paint, identify location and procedures for removal.

#### **C. Elevations and sections for new construction:**

1. Scale: 1/8 inch = 1 foot or larger.
2. Building elevations for all sides of each building.
3. Identify all materials to be used on building exteriors and foundations.

**Complete, final plans and specifications must be submitted to ADFA prior to any preconstruction conference, if required, or prior to construction.**

**III. Outline Specifications:** Provide a brief description of each specification using the Construction Specification Index format or a similar format:

Example:

**DIVISION 2 SITE WORK**

**Section 02232: Select Material Sub-base Course for Flexible Pavement**

- A. General : This section specifies the base course for use with flexible pavement.
- B. Material: Sub-base material shall consist of natural, processed for blends of gravel, stone, sand or screenings and soil or other similar binding or filler material.
- C. Execution: The sub-base material shall be placed on the previously prepared sub-grade. The material shall be placed to the thickness and lines and grades shown.

**IV. Building Design Criteria:**

A. General Building Standards:

- 1. Community Laundry: The development's community laundry must consist of at least 1 washer and 1 dryer for every 10 units in the development. Exceptions: a) If all units in the development have washer/dryer connections, then the community laundry must consist of at least 1 washer and 1 dryer for every 15 units in the development; b) If all units in the development have a washer and dryer furnished at no cost to the tenants by the development, then the development is required to provide no more than 1 washer and 1 dryer.
- 2. Elderly or Assisted Living Developments: All units in elderly or assisted living developments shall be located at the grade level or on an elevator accessible floor.
- 3. Parking Spaces:
  - a. *Family Developments:* Inclusive of handicap designated parking spaces, 1½ parking spaces must be provided for each unit and 1 guest parking space will be provided for every 4 units.
  - b. *Elderly Developments:* Inclusive of handicap designated parking spaces, 1 parking space must be provided for each unit and 1 guest parking space will be provided for every 4 units.
- 4. Single Family Detached Units: Must be at least 3 bedroom units with 2 bathrooms and a minimum single car garage attached.

B. Minimum Building Standards:

- 1. Minimum Unit Net Area Requirements:
  - a. "Net" area is measured from the **interior finished face** of the exterior wall to the **centerline** of the common, or party, wall.
  - b. Minimum Bedroom Net Area is measured from the interior faces of all walls surrounding each bedroom, excluding closets, mechanical rooms, and storage rooms.

<u>Unit Type</u>	<u>Number of Bathrooms</u>	<u>Minimum Unit Net Area*</u>	<u>Minimum Bedroom Net Area</u>
1 bedroom	1	750 sq. ft.	120 sq. ft.
2 bedroom	1.5	950 sq. ft.	120 sq. ft.
3 bedroom	2	1150 sq. ft.	120 sq. ft.
4 bedroom	2	1300 sq. ft.	120 sq. ft.

*\*Unit areas do not include outside storage, covered porches, patios, balconies, etc.*

- c. Exceptions to minimum area requirements:
  - (i.) Developments with USDA Rural Development financing;
  - (ii.) Rehabilitation of existing residential rental units.
  - (iii.) Assisted Living Developments.
- 2. Exterior Building Standards:
  - a. Exterior building coverings: For new construction, very low maintenance materials are required. Acceptable materials include:
    - (i.) Brick;
    - (ii.) High quality vinyl siding with a minimum thickness of .042 and a life time nonprorated limited warranty (50 year) transferable; or
    - (iii.) Cementitious siding.

*All siding materials listed above are required to be 8 inches above the finished floor elevation of the building ground floor, with the exception of concrete patio and covered breezeway areas. Brick or decorative block must be used as an apron material.*
  - b. Prefinished fascia and soffit: Vinyl or aluminum panels should be used and must contain vents.
  - c. Entry doors: Materials for entry doors are to be metal-clad wood or hollow metal construction. "Peepholes" and deadbolt locks are required in entry doors. Dead bolt locks on entry doors should have "thumb latch" on interior side. Double keyed dead bolt locks are prohibited. Minimum clear width of all exterior doors shall be 34 inches.
  - d. Roofing materials: Anti-fungal 235 lb. seal tab shingles over 15 lb. felt paper or metal roof with a minimum 25-year warranty must be used.
  - e. Gutters and downspouts shall be appropriately designed with a minimum 5" gutter and 2"x 3" downspout. All downspouts shall empty onto concrete splashblocks or piped to an appropriate drain location.
  - f. Roof gable vents must be made of aluminum or vinyl materials.
  - g. Attics must be vented.
  - h. All primary entries should be within a breezeway or have a minimum roof covering of 3-feet deep by 5-feet wide, and should be designed to divert water away from the entry door. Entry pads measuring 4 feet by 4 feet and made of impervious material with a minimum slope of 1/4 inch per foot are required at each exterior entry.
  - i. Breezeways functioning as fire exits must be constructed of concrete floor/decking material.
  - j. Exterior shutters are required on all 100% vinyl siding buildings.
  - k. Exterior stairway components, such as stringers, steps, risers, handrails, pickets, and structural supports, and porch and patio components, structural and non-structural, either used as part of the building or within the site development, must be constructed from noncombustible materials such as concrete, steel, aluminum or masonry.
  - l. Exterior lighting is required at entry doors.
  - m. Landscaping: All disturbed areas subject to erosion must be sodded. One 1 1/2" tree per every 2 units. Six 1 gallon shrubs per unit.
  - n. Concrete curbing is required along all paved areas throughout the development site, including parking areas.
  - o. Sidewalk access to all parking spaces must be provided.
  - p. A development sign including the fair housing logo is required.
  - q. A minimum of one enclosed trash dumpster or compactor is required.
  - r. Continuous asphalt or concrete paved access road must be provided to the entrance of the development.

- s. All parking must be asphalt or concrete.
  - t. All sidewalks and walkways must be concrete.
  - u. All driveways on single-family homes must be concrete.
3. Interior Building and Space Standards:
- a. Kitchen spaces:
    - (i.) Each unit must be equipped with a dry chemical fire extinguisher readily accessible in the kitchen.
    - (ii.) New cabinets must have dual sidetrack drawers.
    - (iii.) A pantry closet is required in each unit. The pantry must be 1'6" x 1'6" deep with a minimum five shelves, located in the kitchen.
  - b. Bathroom Spaces:
    - (i.) Tub/shower units should have minimum dimensions of 30-inch width by 60-inch length. Units in elderly and assisted living developments must be equipped with anti-scald valves.
    - (ii.) Water closets should be centered 18 inches from sidewalls or vanity/lavatories.
  - c. Hallways should have a minimum width of 36 inches.
  - d. All interior doors to habitable spaces should have minimum width of 30 inches.
  - e. Overhead lighting is required in each room.
  - f. Sliding glass doors are prohibited.
  - g. A hard-wired with battery back-up smoke detector is required per floor of each unit. A carbon monoxide detector must be installed in each unit. (Only for developments using gas.)
4. Plumbing and Mechanical Equipment:
- a. HVAC units and water heaters are not permitted in attic spaces.
  - b. HVAC units and water heaters must be placed in mechanical closets with insulated walls.
  - c. Water heaters must be placed in drain pans with drain piping plumbed to the outside.
  - d. Gas water heaters shall be located in an individual, separate mechanical closet.
  - e. HVAC refrigeration lines must be insulated.
5. Energy Efficient Systems, Insulation, and Equipment.
- a. Ceiling fans will be installed in each bedroom and living room.
  - b. Shower heads will not exceed a 2.5 gallon per minute flow rate.
  - c. ½" insulation will wrap hot water pipes
  - d. Fluorescent light features will be installed in the kitchen, bathroom(s) and utility room area.
  - e. Exterior wall insulation must have an overall R-16 minimum for the entire wall assembly.
  - f. An exterior house wrap (e.g. TYVEK) must be installed.
  - g. Roof or attic insulation must have an R-38 minimum rating.
  - h. All water piping located on exterior walls and in attic space must be insulated.
  - i. Sound proofing or insulation achieving a sound rating of STC 54 is required in common/party walls and ceilings.
  - j. Gas or oil heated systems shall have a minimum AFUE rating of 90% with a minimum 13 SEER rated air conditioning system.
  - k. Heat pump systems shall have minimum HSPF rating of 7.8 with a minimum 13 SEER rated air conditioning system.
  - l. Windows shall have frames and sashes constructed of wood, vinyl-clad wood, or extruded vinyl. Windows shall have two or more panes of insulated glass, at least one pane of which has a Low-Emission (Low-E) coating, which are argon gas filled. Windows shall have a U-Factor of not greater than 0.41.

**(For rehabilitation developments,** if any of the above elements cannot be included in any building because of structural constraints, an energy audit or report, performed by an independent, professional energy consultant/audit firm, which identifies those constraints but enumerates:

- i. Other effective energy improvements or energy performance measures designed to increase energy efficiency in the particular building, and
- ii. The energy efficiency to be achieved by such improvements of measures on the particular building. The energy audit or report shall describe the methodology/testing procedures utilized.

may be submitted for approval by ADFA staff. The applicant must submit a signed statement that it will implement the energy improvements or energy performance measures identified within the energy audit or report in order to be considered for points under this criterion. Also, a certification from the design architect or licensed engineer confirming the implementation of the energy improvements or energy performance measures will be required prior to the issuance of IRS Form 8609.)

**V. Rehabilitation developments:**

If structural constraints prohibit adherence to ADFA's "Multi-Family Housing Minimum Design Standards", applicant may seek a waiver from ADFA of the standard concerned. Such waiver request must be in writing and include the following:

- A. Certification by the design architect or licensed engineer that the standard concerned cannot be met due to structural constraints;
- B. Certification by the design architect or licensed engineer that no alternative design can be undertaken to achieve the benefit of the required standard due to structural constraints; and
- C. If applicable, statement by applicant that it will implement any alternative identified by the design architect or licensed engineer.

**The following building design criteria will be effective for implementation on the date the Board of Directors for the Arkansas Development Finance Authority adopts the Housing Credit Programs' 2009 Qualified Allocation Plan.**

Universal Design Criteria:

- A. Seven percent (7%) of all residential units within the development must comply with the Level 5, "All-Inclusive" usability criteria as set forth in the Arkansas Department of Human Services' "Arkansas Usability Standards in Housing: Guidance Manual for Constructing Inclusive Functional Dwellings." (AUSH). The AUSH is available on the internet at: [www.studioaid.org](http://www.studioaid.org). Under "Design" click on "standards."
- B. All ground level residential units in any building and all residential units with elevator access in any building in the development must comply with the Level 1, "Visitable" usability criteria as set for in the AUSH.
- C. All exterior and interior doors will be no less than 36" wide.
- D. All residential units in the development will have "closed-fist" operability throughout the unit, e.g., single handle door levers vs. door knobs; push stick lighting and environmental controls; cabinet doors can be opened with a closed fist; single handle faucets in bathrooms and kitchen.
- E. All primary entries, not in a breezeway, must have a minimum roof covering of 5' by 5'.
- F. All primary entries must have an entry pad measuring at least 5' by 5'.
- G. All sidewalks must be at least 5' wide.

