



**ARCHITECTURAL PROCEDURES AND MINIMUM DEVELOPMENT  
STANDARDS FOR  
RESIDENTIAL CONSTRUCTION**

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# KANSAS HOUSING RESOURCES CORPORATION

## ARCHITECTURAL PROCEDURES AND MINIMUM DEVELOPMENT STANDARDS FOR RESIDENTIAL CONSTRUCTION

**INTRODUCTION.** The primary objective of this Guide is to standardize procedures for the design and construction of new and rehabilitated multi and single family housing developments administered by the Kansas Housing Resources Corporation (KHRC). It will assist the design architects and mortgagors/owners in preparing complete applications and support the approval and implementation of developments.

It is the responsibility of the owners and their agents to provide the KHRC with the appropriate documentation to ensure smooth and timely processing of architectural exhibits for the KHRC programs.

### **I. DEFINITIONS**

- A. **Design Architect:** The professional architect, licensed in the State of Kansas, who provides the design services to the mortgagor/owner as required by KSA 74-70 et. seq., and defined in the AIA Document B181, Standard Form of Agreement Between Owner and Architect for Housing Services, and the KHRC Amendment to AIA Document B181.
- B. **Design Engineer:** The professional engineer, licensed in the State of Kansas, who provides support design services as required by KSA 74-70 et. seq., and AIA Document B181.
- C. **Design Corporation:** The design entity must be in compliance with KSA 74-70 et. seq., and must have a certificate of authority to solicit or practice in the State of Kansas.
- D. **Inspecting Architect:** The professional architect or engineer, licensed in the State of Kansas, who provides the construction administration services portion of the work required by the AIA Document B181, Standard Form of Agreement Between Owner and Architect for Housing Services, and the KHRC Amendment to AIA

Document B181. This includes all architectural services required after the start of construction through the eleventh month post occupancy certificate inspection. The design architect may act as the inspecting architect, provided there is no identify of interest as defined by Section III, Page 6.

- E. **Development Team Members:** This team may include the developer, contractor, architect, accountant, attorney, and others.
- F. **Initial Submission:** Certain documents defined herein must be provided for the Corporation's approval of the application for Housing Tax Credits.
- G. **Reservation Period:** The pre-development period in which the developer is approved for Housing Tax Credits. The initial offer and agreement for a tax credit development is made during this time.
- H. **Carryover Allocation:** To receive an allocation, the owner must have expended a minimum of ten percent (10%) of development costs no later than the end of the year from which the credits are reserved. A CPA audit of the costs is required and the owner must own the land. Normally, tax credits are allocated during the development phase.
- I. **Final Cost Certification/Final Allocation.** Upon completion of the construction and after the placed-in-service date, the owner must provide a final cost and financing certification to receive the tax credits. A CPA audit of the costs is required along with documentation that is described in the Qualified Allocation Plan.

## II. GENERAL DEVELOPMENT ACCEPTABILITY

Each development must satisfy the needs of the affordable rental or homeowner market of the local area based on a housing needs assessment, a housing market study, or other supporting documentation.

To be accepted, housing developments must:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	Comply with published KHRC design, submittal, and construction standards.	
2	Comply with applicable local, state, and federal ordinances and laws.	
3	Provide facilities, equipment, and amenities appropriate for use by the intended occupants.	
4	Be designed to meet the construction budget submitted to KHRC by the developer in the initial submittal.	
5	Be designed with long lasting, durable materials that are economical to maintain and relatively maintenance free for at least 75% of the exterior. (Further described in the Minimum Development Standards.)	

KHRC adheres to the following standards and laws in the design of rental projects:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	Construction codes as adopted by the governmental unit in which the development is located.	
2	In the absence of locally adopted codes, the latest available edition of the Uniform Building Code, the Uniform Plumbing Code, the Uniform Mechanical Code, the National Electrical Code, and the CABO One and Two Family Dwelling Code.	
3	Local zoning ordinances.	
4	The Fair Housing Act of 1968, as amended.	
5	Developments receiving federal, state, county, or municipal funding may, in addition to the Fair Housing Act guidelines, be required to comply with the Architectural Barriers Act of 1968, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act, all in their latest revisions. Certain specific accessibility guidelines are to be found in Appendix A of this document.	
6	No part of any residential structure may be included within 30 feet of the outer boundary of a high-pressure gas and liquid petroleum transportation pipeline easement.	

7	No part of any residential structure may be located within 100 feet (horizontal) of any high voltage transmission lines.	
8	Any residential structure located adjacent to a railroad right-of-way or major traffic-way must provide fencing to deter physical access to such life-threatening conditions.	
9	Comply with Council of American Building Officials (CABO) International Energy Conservation Code (IECC) 2006.	
10	For the control of lead hazards, the Lead Paint Poisoning Prevention Act and the current Department of Housing and Urban Development guidelines for the evaluation and control of lead-based paint in housing shall apply to all developments involving HOME, Section 8, or developments being federally insured.	
11	Site plans must identify playground areas. The playgrounds must be located adjacent/near the office, living units, and be highly visible. The area must be secure enough to discourage children from wandering away from their safe environment. Larger facilities should consider multiple play areas for the convenience of tenants.	

### **III. REQUIRED ARCHITECTURAL SERVICES**

The services of a professional architect and engineer, (hereinafter called Design Architect), licensed to practice in the State of Kansas, is required on all developments. Failure to engage a Design Architect acceptable to the KHRC shall be the basis for rejection of the application. For smaller developments, a waiver may be requested.

Architectural services shall be contracted using AIA Document B181, Standard Form of Agreement Between Owner and Architect for Housing Services. The KHRC Amendment to AIA Document B181 shall be signed and attached to the Agreement. See attached Exhibit "A" in the Forms Section.

Item	Description	Check Off
1	The scope of services shall provide all architectural, structural, mechanical, electrical, civil, landscape, and other consulting services necessary to clearly identify the requirements for construction of the development. The scope of services must include provisions for the administration of the construction contract.	
2	The scope of services shall designate the responsibility for the services to be provided, whether by the architect, owner, or other.	
3	Section 10.2, reimbursable expenses shall be stricken, and the architect shall be expected to provide all items within his/her agreement. No more than twenty (20) sets of drawings and specifications (construction documents) shall be provided for bidding and construction purposes, one of which shall be made available upon request to the KHRC.	
4	Modifications may be made to the Owner-Architect Agreement by striking out inapplicable provisions and inserting additional provisions in Article 12. Changes shall not delete any service, either by the architect or owner, necessary to the development. Modifications are subject to the approval of the KHRC.	
5	Required services may not be sublet or delegated to anyone not acceptable to the KHRC.	
6	No modification of the KHRC rider is permitted.	

The fee shall be a fixed fee for the services provided by the Design Architect as stated in the agreement. The amount of compensation for design and construction services shall be separately identified and subject to KHRC's approval.

If there is an identity of interest between the Design Architect and the owner or general contractor, a third party licensed architect or engineer must either administer the construction contract, or review and approve the contract administration performed by the Design Architect. A contract for these third party services must be submitted to the KHRC for approval. An identity of interest is assumed to exist when:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	The Design Architect has any financial interest in the development other than the fee for professional services (this may include forgiven rents, use of vehicles, or other gratuities).	
2	The owner, contractor, or any other officer, director, stockholder, or partner of such owner or contractor has any financial interest in the architectural firm.	
3	The Design Architect has stock or any financial interest in the owner or contractor.	
4	The owner or contractor, or any other officer, director, stockholder, or partner of such owner or contractor provides any of the required architectural services; or where the owner or contractor or any other officer, director, stockholder or partner of such owner or contractor, while not directly providing an architectural service, acts as a consultant to the Design Architect.	

#### **IV. APPLICATION STAGE**

At the application stage, KHRC staff will review the architectural exhibits for general site-related issues, rehabilitation issues (if applicable), and cost verification. A certification statement by the Design Architect who reviewed the documents shall state that the design fully complies with all requirements of the KHRC and the local jurisdiction.

One set of the following shall be included in the application for funding:

##### **Architectural Exhibit**

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	City/Local map clearly indicating the development's location.	
2	Site Plan – ALTA survey, including all options.	
3	Photographs of existing buildings, if the development involves rehabilitation or buildings that are scheduled for demolition.	
4	Preliminary architectural drawings covering the site plan, buildings plan(s) and typical floor plan(s) in 1/8" scale with appropriate measurements indicated.	
5	Contractor's/Mortgagor's cost breakdown (FIN 115).	
6	Scope of work for rehabilitation developments.	
7	Certification statement that the development will comply	

	with Council of American Building Official's IECC 2006.	
8	Certification statement that the development will comply with the accessibility requirements of the Fair Housing Act of 1968, as amended.	
9	Certification statement that the project will comply with the applicable accessibility requirements of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, and the Architectural Barriers Act of 1968.	
10	Letters from the appropriate entities indicating that the required utilities (water, gas, electric, storm sewer, and sanitary sewer) are available to the site and adequate for the proposed development.	

**V. PRE-DEVELOPMENT STAGE**

The following documentation shall be provided to KHRC for review at the pre-development stage:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	A complete set of construction documents adequate to describe the proposed site development, architectural, structural, mechanical, and electrical components of the development in sufficient detail to verify compliance with local zoning and building requirements and with all federal regulations.	
2	<p>Geotechnical engineering report.</p> <ul style="list-style-type: none"> <li>a. Identifies and describes soils by the nomenclature of the Unified Soils Classification System.</li> <li>b. Boring must be in, or adjacent to, the proposed foundation area.</li> <li>c. At least one boring must be made for each building, unless KHRC has reason to believe that more borings are needed. For buildings supported on pilings, one boring must be made for every 1,600 sq. ft. of foundation area.</li> <li>d. Borings must be at least to the bottom of the proposed footings and deep enough to locate bearing strata, which will support the proposed structure. When rock is encountered, depth of drilling into the rock shall be sufficient to establish rock quality regarding voids, fissures, and strength.</li> <li>e. When ground water conditions influence the building design, observation of ground water levels must be recorded at the time of boring and</li> </ul>	

	at least 48 hours later.	
3	A Phase I Environmental Report by an entity qualified to provide a comprehensive site assessment that meets the ASTM Standard E-1527. If this report recommends additional testing, a Phase II Environmental Report will be required prior to closing.	
4	A FEMA Flood Zone Area Map that includes the development's site, community panel number, and the date. A letter from the local jurisdiction stating that the property has been reviewed and is not within the 100-year flood plain may be used as a substitute for the above.	

The following documentation shall be available upon request for the KHRC's review at the pre-development stage:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	AIA Document B181, Standard Form of Agreement between the Owner and Architect for Housing Services, Exhibit "D" found in the Forms Section of this guide.	
2	The KHRC Amendment to AIA Document B181. See attached Exhibit "A" found in the Forms Section of this guide.	
3	Mortgagor and Contractor's Cost Breakdown, KHRC Form FIN115. When subcontractor work and material suppliers exceed \$10,000.00 their actual bids must be attached.	
4	A list of major (contracts exceeding \$10,000.00) subcontractors by work category (to include mechanical, plumbing, electrical, framing, and landscaping).	
5	A U.S.G.S. topographical Map (7.5 minute series) with the site located, total acreage noted, and the section township and range identified for the development, as well as any sources of imported fill material; or provide a completed Cultural Resource Assessment Form and Contractor's Qualification Statement, AIA Form A305.	
6	Site survey and Surveyor's Report (meeting requirements of the Kansas Minimum Standards for Land Surveyors).	
7	Statement of Contractor's Completion Assurance. The KHRC requires either a 100% Performance/Payment Bond or a Completion Assurance Agreement.	

**VI. CONSTRUCTION DOCUMENTS**

Construction documents must include the following:

Item	Description	Check Off
1	<p>Specifications or Project Manual including:</p> <ul style="list-style-type: none"> <li>a. A current edition of AIA Document A201, General Conditions of the Contract for Construction. An original of this document must be included in the set of Construction Documents submitted to the KHRC. It may not be included by reference only.</li> <li>b. For HOME or any other federal program requiring HUD Form 2554, Supplementary Conditions of the Contract for Construction, along with current wage determination as provided by the KHRC. Note that this determination must be verified and updated within 10 days of the construction loan closing (initial closing). It is the owner’s responsibility to request this update from the KHRC at the appropriate time.</li> <li>c. Specifications to clarify construction administration requirements.</li> <li>d. Technical specifications as required to clarify materials and methods of construction.</li> </ul>	
2	<p>A cover sheet with the following information attached:</p> <ul style="list-style-type: none"> <li>a. Development’s name and location.</li> <li>b. Names of the design architect, inspection architect (professional providing construction administration), design engineer, owner, contractor, and the bonding company, if any.</li> <li>c. Spaces for signatures of each of the entities listed in the box above, title of person signing, and the date.</li> <li>d. A tabulation of the living units by unit type, number of each type in each building, number of non-rental living units, gross and net rentable square foot totals.</li> <li>e. Square footage of each unit type, each building, and all non-residential spaces included in the development.</li> <li>f. Location map.</li> </ul>	

	<ul style="list-style-type: none"> <li>g. Number of covered, uncovered, and accessible parking spaces.</li> <li>h. Description of building codes enforced by the local governing body and/or used in the development design.</li> <li>i. Accessible standards used in the development design with all exceptions to compliance identified.</li> <li>j. Certification that the development design complies with IECC 2006.</li> <li>k. An index of drawings, which includes the drawing title, drawing number, and date of latest revision.</li> </ul>	
3	<p>A topographic survey at a minimum scale of one inch to 30 feet.</p> <ul style="list-style-type: none"> <li>a. Include an ALTA Survey, including all options.</li> <li>b. Identify the development's name and project number.</li> <li>c. The name of the city, county, and state of the property's location.</li> <li>d. A North arrow—magnetic and true.</li> <li>e. The owners of, and lot and block numbers for the subject property, and the adjacent properties.</li> <li>f. A legal description of the property, total square feet, and acreage.</li> <li>g. Dimensioned length and direction of each boundary, and the physical indication of boundary (monuments, markers, fences, etc.).</li> <li>h. Material variations from record lines by fences, walls, or structures (either on this property or adjoining).</li> <li>i. All encroachments or deviations from the description of the property, or conflicts with descriptions of adjoining properties.</li> <li>j. Existing on-site and adjacent streets, alleys, drives, and walks. Provide the street names or designations (include widths and dimensions). Also, indicate surfacing, curbs, and other pertinent data. Give the distance to the nearest street.</li> <li>k. All easements, rights-of-way lines to paving, and distance of setback lines from property lines.</li> <li>l. Location and size of all utility lines, facilities, poles, hydrants, manholes, etc., including those on or adjacent to the property and in adjacent streets. Include water, sewer (storm and</li> </ul>	

	<p>sanitary), gas, electric, telephone, and TV (cable, internet access, etc.). Include sewer invert elevations and direction of flow.</p> <p>m. All high-pressure gas and liquid petroleum transmission pipelines within 220 yards of the property boundaries.</p> <p>n. Location of natural features such as preservable trees, streams, rock outcroppings, etc.</p> <p>o. Indicate, describe, and dimension all on-site existing structures.</p> <p>p. Indicate, describe, and dimension structures adjacent to the site.</p> <p>q. Available information about subsoil, ground water, fill, buried foundations, tanks, debris, etc.</p> <p>r. Name of Kansas Licensed Surveyor, seal, signature, and date of survey.</p> <p>s. Meet requirements of Kansas Minimum Standards for Land Surveying.</p>	
4	Site plan, grading, drainage, and site MEP plan(s) and details.	
5	Landscape plan. A preliminary landscape must be submitted showing general plant types, quantities, and locations. Submit the final landscape drawing during construction, identifying quantities, plant types, seed and sod areas, and other landscape information.	
6	Dimensioned floor plans of sufficient detail to review individual unit and building layouts.	
7	Exterior building elevations indicating all exterior materials and heights.	
8	Structural plans and details, including all required connection details.	
9	Wall sections and construction details, including stair details. Note all fire resistive assemblies by detail and design assembly number, such as UL design number. Indicate how penetrations through all fire resistive construction is to be protected and specify materials used. Reference Appendix Drawing KS-27 for staggered stud framing for common walls between all units that is acceptable to the KHRC.	
10	Details indicating how the Final Fair Housing Accessibility Act Design Guidelines and Construction Requirements are being met.	
11	Details indicating how the Americans with Disabilities Act Accessibility Guidelines (ADAAG) are being met in the public and other areas. Sample guides are provided in the Appendix of this document.	

12	For HOME and federally insured developments, details indicating how the Uniform Federal Accessibility Standards are being met.	
13	Schedules, as required, indicating door and window sizes and door and window finish materials.	
14	Mechanical plans, plumbing plans, and specifications for all mechanical equipment.	
15	Provide an energy audit in compliance with Kansas Energy Star <sup>(sm)</sup> Home Energy Rating System (HERS). (A copy is attached in the Appendix.)	
16	Electrical plans, riser diagrams and schedules, as required.	
17	Fire alarm and sprinkler systems, if included in the development, may be in the form of specifications. Shop drawings for these systems shall be submitted during construction, and must be prepared by a registered engineer.	
18	Site/development identification sign similar to Appendix Drawing K-28.	

KHRC will review the construction documents and prepare comments. A copy of these comments will be forwarded to the Design Architect for review and response.

The Design Architect shall provide the KHRC with a written response to the KHRC staff comments.

## **VII. CONSTRUCTION INFORMATION**

The following information shall be made available upon request to the KHRC:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	Project team contacts list with addresses and telephone numbers of Design Architect and/or Inspecting Architect, Design Engineer, General Contractor's Project Manager or superintendent, Owner's representative, and others as required. Update list as needed throughout construction.	
2	A copy of the construction schedule and schedule of progress meetings and payment application inspections. Update list as needed throughout construction.	
3	A list of all major subcontractors and suppliers. Update list as needed throughout construction.	

4	Copies of all field inspection reports prepared by the Design Architect/Inspection Architect. These reports should include the date and time of inspection, weather information, and approximate percentage of project completion.	
5	Copies of any progress meeting minutes.	
6	If requested, copies of any approved shop drawing submittals, data sheets, test results, or certifications.	
7	Copies of drawings and specifications for any off-site improvements related to the development.	
8	Copies of all Architect's Supplemental Instructions and Change Orders (on AIA Document G701).	
9	A copy of all documents must be kept in the job site trailer and available to the KHRC staff as needed.	
10	Job/development design must be provided and installed at start of construction.	

Any deviations from the approved Construction Documents must be submitted on proper AIA forms and approved by the KHRC in advance.

The KHRC staff will have the right of reasonable access to the construction site, the right to inspect all work performed, and materials furnished for the development.

## **VIII. CONSTRUCTION COMPLETION**

- A. Notify the KHRC staff, in writing, when construction has reached 90% completion.
- B. Provide the KHRC with the following:
  - 1. Punch list/final inspection report in format similar to the Sample Punch List. See Exhibit "B."
  - 2. A copy of the executed Certificate of Substantial Completion, AIA Document G704.

**IX. FINAL REVIEW**

Final review documents shall consist of the following:

<b>Item</b>	<b>Description</b>	<b>Check Off</b>
1	A copy of the Certificate of Occupancy or Final Inspection Report from the governmental unit having jurisdiction, if applicable.	
2	A copy of an “as-built” ALTA Survey, including all options of an ALTA survey.	
3	The Inspecting Architect’s Certification. See attached Exhibit “C.”	
4	A list of final “incomplete items” and a narrative indicating how, by whom, and when each item will be completed.	

KHRC shall be notified two weeks in advance of the final inspection. This inspection may be scheduled concurrent with the Inspecting Architect’s Punch List Inspection(s), provided that inspection occurs when the work is substantially complete. If the inspection is not scheduled concurrently with the Inspecting Architect’s inspection, the Inspecting Architect’s Punch List must be available to KHRC staff. Provide the final “incomplete items” list to the KHRC staff. The final inspection will determine the amount withheld from the final construction draw, which will be held in an incomplete construction escrow account. The results of the final inspection shall be provided to KHRC.

Upon request by the KHRC, a latent defects escrow, in an amount equal to 2.5% of the construction contract amount shall be established by the Contractor at final closing. The escrow, when requested, shall not be released until 12 months from the date of substantial completion, as established by the Certificate of Substantial Completion, AIA G-704, of the entire project. This amount will be released only after an inspection and approval by the owner/mortgagor, the Design Inspecting Architect, and the KHRC. The Contractor shall schedule this inspection with the Owner/Mortgagor, the Design Inspecting Architect, and the KHRC.

When requested by the KHRC and prior to the final acceptance and release of the escrow, the developer shall provide the KHRC a copy of the “as-built”

drawings, specifications, and a completed ALTA Survey (with all options) on CD ROMs. In addition, upon request from the KHRC, a letter from the Design Architect stating that the Construction Documents are modified to an as-built status shall be provided, with a certification that the development was constructed according to these documents.

**X. WAIVER**

The KHRC reserves the right to waive any of the provisions outlined herein based solely on its discretion.

## MINIMUM DEVELOPMENT STANDARDS

Effective Date: January 1, 2011

All new construction developments using resources administered by Kansas Housing Resources Corporation must comply with the minimum development standards outlined below:

### A. Privacy

- 1) Common Walls – All walls between living units must be formed on double plates with a minimum space of one inch between the plates or demonstrate a Sound Transmission Coefficient (STC) minimum score of 50 based on USG Corporation ratings to insure maximum sound barriers and privacy.
- 2) Boundaries – Patios must be partitioned with fencing or T dividers that are at least six feet high. Perimeters of properties must include landscaping or fencing that offers barriers to adjoining properties.
- 3) Porches – Front and rear porches and patios must comprise a minimum of 40 square feet of surface to allow for outdoor seating and maneuverability.

**B. Accessibility** – For any building with four or more units, all ground floor units and all units in buildings with elevators must comply with the Fair Housing Act and ANSI; UFAS applies if federal money is involved. (Tax credits and tax-exempt bonds are not federal money) All common areas must comply with ADA. All units that meet these requirements must contain the following features. This list is not inclusive, but are the main items for which KHRC inspects:

- 1) Front doors must be 36 inches wide and provide a clearance of 34 inches. Interior doors must be a minimum of 34 inches wide and provide a clearance of 32 inches. Hallways must be a minimum of 36 inches wide to allow adequate clearance for persons using wheelchairs. (This applies to all units on all floors regardless if there is an elevator.)
- 2) An accessible route into and through the unit.
- 3) Light switches, electrical outlets, thermostats and other environmental controls that are operated on a regular basis must be mounted in a range from 15 to 48 inches above the floor. Light switches and electrical outlets behind countertops

must be mounted at 44 inches with a front approach and at 46 inches with a side approach.

4) A 30” by 48” clear space must be present in front of all appliances and sinks. The cabinet beneath the kitchen and bathroom sinks may need to be removable in order to comply with the Fair Housing required clear space.

5) Door swings must have an 18 inch clearance beside the doorknob side of the door to allow people with mobility impairments to open the door from the side. The clearance must be on the side of the room that the door opens into. Doors must not swing out to meet this requirement.

6) Bathroom walls constructed with sufficient blocking to allow for the installation of grab bars and other devices to assist in maneuvering within the bathroom. The blocking may need to be on the outside of the wall in order to accommodate showers that are not flush with the wall.

7) Lever handles instead of doorknobs and lever handles on all sinks on all 1<sup>st</sup> floor units or all units served by an elevator.

8) Any development with single family, duplexes, or tri-plexes must meet the accessibility requirements contained in K.S.A. 2002 Supp. Chapter 58-1401 through 58-1407, and the minimum development standards outlined herein.

9) Rehab projects, especially gut rehabs where new interior walls are assembled will be held to the same requirements as new construction.

### C. Energy Efficiency

1) New Construction – All buildings must meet or surpass the overall thermal performance requirements and the annual energy consumption requirements of the 2006 International Energy Conservation Code and score a minimum of 80 on the performed audit, or a score no greater than 100 if version 12.0 is used. Up to five units with different floor plans and orientations for complexes of less than 50 units and up to 5% or a maximum of ten units in complexes of 50 or more units must be rated and certified by an audit from a certified Kansas Rater using the Rem/Rate Software. **Electric Resistance Heat is not allowed as the main source of heat.**

- 2) All buildings must insulate the footing, install vapor barrier under the slabs, and use Tyvek or other suitable house wrap on the exterior. However, if a building can meet or exceed the 2006 IECC or be certified as Energy Star the footing insulation is not required. In addition, footing insulation with visible gaps or bulges at the seams and corners will disqualify the insulation as a value in the building audit.
- 3) All attics must have a minimum of R-49 insulation.
- 4) Air conditioning units must have a minimum SEER rating of 14.
- 5) Heat pumps units must have a minimum HSPF rating of 9.05.
- 6) All bathrooms must have exhaust fans vented to the outside.
- 7) All hot water heaters must have an EF factor of 0.62 if using gas or 0.92 for electric, insulation blankets installed required (If manufacturer allows). All units must not exceed a ventilation rate of 15 CFM per person and combustible appliance or .35 ACH, whichever is greater.
- 8) If the buildings have attic ductwork, the trunk line duct work must be covered with the same amount of insulation as the attic. (R-49)
- 9) Rehabilitation – All buildings must meet or surpass the overall thermal performance requirements of the 2006 International Energy Conservation Code and score a minimum of 80 on the performed audit, or a score no greater than 100 if version 12.0 is used. Up to five units with different floor plans and orientations for complexes of less than 50 units and up to 5% or a maximum of ten units in complexes of 50 or more units must be rated and certified by an audit from a certified Kansas Rater using the Rem/Rate Software.

If buildings cannot meet the above requirements, the rater must prepare an Improvement Analysis showing the most cost effective improvements needed to bring the building into compliance with the above standards.

#### **D. Maintenance Efficiency**

- 1) All buildings must have low-maintenance exterior finishes, to include but not be limited to brick, stone, hardy board, fiber cement siding, or vinyl siding. If vinyl siding is used, it must be at least .042 (inches) in thickness, and have a formed, insulating backing. An example of the backing would be Solid Core by Oracle or

ThermoWall by CertainTeed. **Flat insulation or fanfold is not allowed.** Siding with a thickness of .050 or greater may be used without the formed, insulating backing with approval from this office. In this case the flat insulation or fanfold may be used.

2) Trash dumpsters must be located outdoors in inconspicuous places, shielded by landscaping or an enclosure.

**E. Amenities**

1) A reasonable amenity package, such as washer/dryer connections, outdoor seating and walking paths, playgrounds, security systems, and community room must be provided consistent with the size and type of development.

2) Landscaping must include sodding in prominent areas around the approach to the property and the office. At least two-inch diameter trees must be included in the landscaping scheme.

**F. Child Safety**

1) Adequate turning space and loading areas for school buses must be provided in family properties.

2) Shelters for children waiting for the school bus must be provided when there is no other natural waiting area.

3.) Playgrounds must be located in areas that offer maximum protection and visibility, such as near the office or near and around buildings. An apartment community containing more than 100 units must offer several smaller play areas within the property. Playgrounds must include an accessible sidewalk(s) up to and through the playground area.

4) Utility connections to buildings should be unobtrusive, and should not obstruct windows or access. Shut off valves must have lever handles and be accessible.

**G. Fines**

1) Owner fails to meet the minimum development standards as agreed to in the Reservation of Low Income Housing Tax Credits: \$500 per unit.

**Under exceptional circumstances, waivers to these requirements may be requested.**

**KANSAS HOUSING RESOURCES CORPORATION**

**ARCHITECTURAL PROCEDURES  
FOR  
RESIDENTIAL CONSTRUCTION**

**FORMS SECTION**

## **EXHIBIT “A”**

### **AMENDMENTS TO AIA DOCUMENT B181 Standard Form of Agreement Between Owner and Architect for Housing Services**

The provisions of this Amendment supersede and void all inconsistent provisions of the Agreement.

1. The Owner and the Architect represent that they are familiar with Kansas Housing Resources Corporation (KHRC) requirements, including all standards as set forth in publications given to them by the KHRC for this Development and they will perform all services in accordance with the applicable requirements of the KHRC.
2. The Owner and the Architect recognize the interest of the KHRC in the Development, and any action or determination by either the Owner or the Architect is subject to acceptance or rejection by the KHRC.
3. The portion of the Architect’s services and responsibilities and the Owner’s responsibilities shall not be sublet or delegated without prior approval of the KHRC.
4. The Architect will advise the KHRC, as well as the Owner, of any omissions, substitutions, defects and deficiencies observed in the work of the Contractor.
5. The Architect shall issue Certificates of Payment and Certificates of Substantial Completion. These certificates shall be AIA Document G702, Application and Certificate for Payment and G703, Continuation Sheet for G702, or in a form acceptable to the KHRC.
6. The Architect will furnish copies of all field orders and field reports to the KHRC, when requested, in addition to the Owner.
7. The Agreement shall not be terminated without five (5) days prior written notice to the KHRC.

EXHIBIT "A" (Continued)  
AMENDMENTS TO AIA DOCUMENT B181

8. The Owner and the Architect shall recognize, as a valid reason for termination, any request by the KHRC for termination because of inadequate performance, undue delay or representation, which may make the further services of the Architect unacceptable to the KHRC.
9. If the Development for which the drawings or specifications prepared by the Architect has not been completed, and there is a default or foreclosure, the KHRC may use the drawings or specifications to complete construction of the Development without additional cost.
10. The Architect shall participate in a latent defects inspection no sooner than nine (9) months after the date of Substantial Completion, nor later than eleven (11) months. The Architect shall issue a list of construction contract defects arising out of this inspection to the Owner, Contractor, and the KHRC.

\_\_\_\_\_  
ATTEST:  
(SEAL)

\_\_\_\_\_  
OWNER:

\_\_\_\_\_  
ATTEST:  
(SEAL)

\_\_\_\_\_  
ARCHITECT:

## EXHIBIT “B”

### SAMPLE PUNCH LIST

AAA Architects  
111 South First Street  
Somewhere, Kansas  
Phone 785-555-5555 Fax 785-555-5556

Inspection Report for Somewhere City Apartments  
2222 South Second Street  
Somewhere, Kansas

Date of Inspection:

Note: The following are to be completed or corrected by the Contractor prior to final acceptance of the Development. The Contractor shall return a copy of this list to the Architect (or Engineer) after each item has been addressed, properly dated, and initialed by the person responsible for corrective action.

DESCRIPTION	CONTRACTOR ADDRESSED INITIAL/DATE	ARCHITECT ACCEPTED INITIAL/DATE
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#### Site

- |   |       |       |
|---|-------|-------|
| 1. 8 Shrubs at clubhouse dead – replace                     | _____ | _____ |
| 2. Seed and fertilize areas per drawings and specifications | _____ | _____ |

#### Building #1

- |  |       |       |
|--|-------|-------|
| 1. Front window of Unit X is cracked – replace | _____ | _____ |
| 2. Painting incomplete west wall of Unit Y     | _____ | _____ |

*This format is recommended in terms of the layout. Other information may be added per design firm’s policy if desired. The work descriptions, the Contractor’s initialed response and date for each item, and the Architect’s (or Engineer’s) acceptance of each item are required.*

**EXHIBIT “C”**

**INSPECTING ARCHITECT’S CERTIFICATION**

KHRC Development No. \_\_\_\_\_

TO: KANSAS HOUSING RESOURCES CORPORATION

To the best of my knowledge, information, and belief, the Development \_\_\_\_\_  
\_\_\_\_\_ (Development Name and Address) has been built  
in accordance with the Construction Documents for the above referenced  
Development, which were prepared by \_\_\_\_\_  
(Development Architect) and incorporated as part of the Construction Contract on  
said Development. Any changes made to the approved Construction documents  
during construction have been documented after review and approval by the  
undersigned and the KHRC.

INSPECTING ARCHITECT:

By: \_\_\_\_\_

Date: \_\_\_\_\_