

## **NEW CONSTRUCTION INSPECTION GUIDELINES**

### **.01 INTRODUCTION**

In accordance with Alaska Statute (AS) 18.56.300, residential housing constructed on or after **July 1, 1992**, must undergo an approved inspection process to be eligible for financing by Alaska Housing Finance Corporation (AHFC). The minimum number of inspections, documentation, and other requirements are outlined below.

Residential housing located in approved municipalities as described in .08 is exempt. However, such housing is subject to the building codes adopted and enforced by the approved municipality.

### **.02 INDEPENDENT INSPECTOR REQUIREMENTS**

Only an authorized inspector meeting the following definition may perform the required inspections. An authorized inspector is not hired by, and has no relationship to, AHFC, nor a relationship (personally or financially) to the builder, developer, owner, real estate professional or other person that is a party to the transaction.

An authorized inspector is:

- An individual who is registered under AS 08.18 to perform home inspections for new construction.
- An architect licensed under AS 08.48, an engineer licensed under AS 08.48, or such other person acceptable to AHFC who has received prior approval in writing from AHFC.
- An inspector from any governmental agency outside the State of Alaska, whose function is the inspection of prefabricated/modular units which may be transported to the State of Alaska, and who inspects prefabricated units for compliance with the AHFC construction standards. This inspector may not be an employee of the manufacturer.

### **.03 REQUIRED INSPECTIONS**

A minimum of five (5) inspections is required; more may be necessary, depending on the construction methods used. An authorized inspector performs each inspection and completes AHFC Form PUR-102, Summary of Building Inspections.

#### **A. Plan Approval**

Plan review and approval is the first inspection and should be completed prior to the beginning of construction. (Refer to .11.B for the definition of “construction start.”)

## B. Footings and Foundation

Footings and foundation should be supported by undisturbed natural soils or engineered fill that complies with the applicable state building code. Footings and foundation construction should be capable of accommodating all loads and of transmitting the resulting loads to the supporting soil according to the applicable state building code.

### 1. Footings

Exterior walls should be supported on continuous solid or fully grouted masonry or concrete footings, wood foundations, or other approved structural systems. An inspection is made after excavations for footings are completed and any required reinforcing steel is tied in place. When applicable, ground cable should be installed.

### 2. Foundation

Inspections may vary depending on the type of construction and the supporting soil. The foundation inspection includes, but is not necessarily limited to, an inspection of the foundation's reinforcement, depth, drainage, anchorage, elevation, backfill, and waterproofing or damp-proofing.

## C. Rough-In Inspections (Framing, Electrical, Plumbing, and Mechanical)

### 1. Framing

Interior and exterior walls should be constructed according to the type of material used as specified in the state building code. The framing inspection should be made after all electrical, plumbing, and mechanical rough-in has been inspected and all ducts, chimneys, hold-downs and shear walls are installed and framing is complete. Pre-assembled walls must be ICC listed. The manufacturer must comply with ICC's quality control requirements, continuing to keep the wall assemblies listed, as long as the wall assemblies are used in new construction.

Either the manufacturer of the pre-assembled walls or the contractor using them must provide the authorized inspector with a copy of the third-party evaluation report on the wall assembly. The authorized inspector must verify that each wall assembly is, at a minimum, stamped with: 1) the name and address of the manufacturer and 2) the third-party evaluation report number.

### 2. Electrical

The electrical inspection includes an examination of the materials, components, and electrical equipment installed. All rough wiring for the structure and the electrical service is inspected at the same time. Rough-in inspection includes, but is not necessarily limited to, all wiring within the walls, all circuit breakers, panel boards and ground splices terminated by mechanical means. The inspection takes place after all wiring systems, including the ground conductor, have been installed in approved boxes,

cabinets, and service equipment. Switches, receptacles and fixtures should not be installed at the rough-in.

### 3. Plumbing/Mechanical

In accordance with the state building code, the plumbing and mechanical systems are inspected prior to covering or concealing any portion of the system. The inspection takes place after the installation of all water piping, drain, waste vent piping, fuel gas piping, HVAC ducting, range, dryer and bath exhaust ducting, furnace, boiler, water heater, unit heaters, and/or other fuel fired appliances and their venting system. Also in accordance with the state building code, water or air pressure testing is required on all water, drain, waste and vent piping. Air pressure testing is required on all fuel gas piping.

#### D. Insulation and Vapor Barrier

Generally, the insulation/vapor barrier inspection is completed after the rough-in framing, electrical, plumbing and mechanical inspections are approved, all insulation has been installed in ceilings and walls, and all vapor retarder is in place and sealed. The authorized inspector must also have adequate access to determine compliance with Alaska Building Efficiency Standard (BEES).

#### E. Conditional Approval

A conditional approval is acceptable **only** when unfinished items cannot be completed due to weather or other delays beyond the builder's/contractor's control. Conditioned items must not pose a risk to health or life/safety. The lender is responsible for ensuring timely completion of the work and obtaining final documentation.

#### F. Final Approval

Generally, the final inspection takes place when a residential unit is 100% complete. All health or life/safety items must be addressed and the final inspection performed prior to occupancy.

## **.04 PREFABRICATED/MODULAR HOMES**

Prefabricated/modular homes are constructed in a factory under "ideal" conditions, structurally engineered to be built in sections or modules, which can be transported to the site. During construction modular units must be inspected by the appropriate governmental entity in the state or country in which the unit is manufactured, **or** by an authorized inspector. The purpose of the inspection is to provide oversight and to ensure compliance with current adopted building codes. An authorized inspector may perform all the inspections listed on the applicable Form PUR-102, or in some cases, do so in combination with a governmental entity who certifies compliance with framing,

electrical, plumbing, mechanical, insulation, and vapor barrier. (Refer to .06 for a description of PUR-102 forms.)

#### A. Plans and Inspections

If a governmental entity in the state or country where the construction takes place performs the inspections, an authorized inspector must complete a plan review **prior** to the plans being submitted to the governmental agency. The plans must clearly specify the seismic zone, along with the wind and snow loading requirements for the community where the unit is to be located.

The governmental agency must conduct a plan review as well as inspecting the construction of the unit.

#### B. Governmental Seal/Insignia

Modular units **must** have an insignia/seal attached to each completed unit. For inspections performed by an authorized inspector in conjunction with a governmental entity, the seal shall be attached by the governmental entity at the factory. Modular manufacturers who are using authorized inspectors for the entire inspection process must develop a seal/insignia. The seal/insignia must include, at a minimum; the manufacturer's name and address, serial number of the unit along with the year built, wind and snow loading requirements and seismic zone for which the unit has been designed, construction codes used, dates of inspections, and the inspector's name. The authorized inspector must permanently affix the seal/insignia to the unit.

#### C. On-site and Final Inspections

An authorized inspector must complete the foundation inspection. When the modular unit is placed on the foundation, the authorized inspector must verify that the sections have been properly joined and connected according to the manufacturer's recommendations; the vapor retarder has been properly sealed, all service connections are complete and all systems are operational. The manufacturer's seal/insignia must be present and permanently attached to each section.

### **.05 MANUFACTURED HOMES**

Manufactured homes placed on permanent foundations must comply with all the requirements of Housing and Urban Development (HUD) Regulations 24 CFR Parts 3280 and 3282 for the specific area of Alaska in which the unit is being placed.

An authorized inspector must approve the foundation plans, and inspect the footings and foundation. The inspector must be on site to certify that multi-section units are joined according to manufacturer instructions, the vapor retarder has been properly sealed, and all service connections are properly secured and operational.

Once the manufactured home has been placed on its foundation, the authorized inspector performs the final inspection to ensure the unit is properly secured, tied down and the HUD seal/insignia is in place.

## **.06 INSPECTION FORMS**

AHFC designed Form PUR-102, Summary of Building Inspections, for the authorized inspector to sign certifying that the residential unit is in compliance with the state building code. The applicable PUR-102 should remain on the construction site until all the inspections are completed and the inspector has signed off on the final inspection.

- [Form PUR-102](#) for site built homes.
- [Form PUR-102-MD-Gov](#) for prefabricated/modular homes inspected by a governmental entity inspector **and** an authorized inspector. In addition, the governmental entity's inspection report must be recorded as addendum "A."
- [Form PUR-102-MD-Fee](#) for prefabricated/modular homes inspected by an authorized inspector only.
- [Form PUR-102-MH](#) for manufactured/mobile homes.

AHFC recognizes that more than one authorized inspector may perform inspections at various stages of construction. A certification must be made for each of the required inspections. The final inspector may rely on the certifications of the previous inspectors when signing the final inspection certifying compliance with the law.

After the builder/contractor signs the applicable PUR-102 certifying compliance with AS 18.56.300 and 15 AAC 150.030, the form should be recorded. **Recording the PUR-102 is the only means of tracking compliance with the law.** Any interested party, such as the builder, owner, or lender may take responsibility for doing so.

**Note:** If the PUR-102 is not recorded, the property **is not** eligible for AHFC financing.

## **.07 CODES AND APPENDIXES**

All inspections are based on the 2009 IRC with AHFC amendments. The construction standards mean:

- For building standards, the code for all residential buildings, including those for buildings with three dwellings or less, set out in the version of the 2009 IRC with AHFC amendments. that code to buildings with fewer than three dwellings.

- For mechanical standards, the code for all residential buildings, including those for buildings with fewer than four dwellings, set out in the version of adopted 2009 IRC Standards.
- For plumbing standards, the code adopted by the Department of Labor under AS 18.60.705 except where such code conflicts with requirements for residential wastewater disposal established by the Department of Environmental Conservation (DEC) in which case the requirements of the DEC shall be the standard.
- For electrical standards, the minimum electrical code prescribed by AS 18.60.580.

## **.08 APPROVED MUNICIPALITIES**

Annually, AHFC reviews all municipalities who submit documentation for inspection approval. In order for a municipality to obtain approval, it must **adopt and enforce** codes that meet or exceed the state building code for residential housing. (Refer to .07 Codes and Appendixes.)

AHFC determines which municipalities comply with the inspection procedures mandated by AS 18.56.300 and prepares a list for public use. The [List of Approved Municipalities](#) in the Appendix consists of the municipalities that have building codes and enforcement procedures that meet or exceed the state building code for residential housing. An approved municipality issues a “Certificate of Occupancy” or “CO” as evidence of compliance.

## **.09 LIABILITY OF INSPECTORS**

In accordance with AS 18.56.300 (c), a person may not bring an action for damages against an authorized inspector who inspected a residential unit unless the action is for damages caused by the gross negligence or intentional misconduct of the inspector.

## **.10 WHEN INSPECTIONS ARE REQUIRED**

### **A. Inspections Required**

Following are examples of construction projects that must undergo the approved inspection process.

1. Any dwelling unit where construction began on or after **July 1, 1992**.
2. Improvements to any dwelling where the original construction began on or after **July 1, 1992**. If the original construction required inspections, improvements to the living space, whether a total renovation or small addition, also require inspections.

3. Newly constructed manufactured and modular housing units placed on permanent foundations.

#### B. No Inspections Required

Following are examples of projects that **do not** require construction inspections.

1. Improvements to dwellings where the original construction began **prior to July 1, 1992**. However, AHFC may require an inspection for an addition or renovation to determine the quality of construction and compliance with adopted building, fire and safety codes. If requested, the inspection may be performed by an architect, engineer, appraiser, or other qualified building inspector. AHFC's decision is made on a case-by-case basis and depends upon the scope and nature of improvements.
2. Non-living spaces such as garages, sheds, decks, fences, patios, workshops, and boat sheds do not require inspections.
3. Non-conforming housing as determined by AHFC and defined in the Selling Guide Section 5006.

### .11 DEFINITIONS

#### A. Inspection

Except for plan approval, an inspection means an "on-site" inspection(s) of the construction project.

**Exception:** With AHFC's prior written approval, foundation inspections in rural areas (those meeting the definition of "rural" in the Selling Guide Section 1003), may be conducted by videotape, representative stationary photos, or other acceptable methods. A disinterested third party should take the videotape and/or representative photos, which must fully represent the work performed and the inspection being conducted.

#### B. Construction Start

AHFC considers construction to have begun if the pilings, footings, or foundation has been started. Any improvement to a dwelling where the original construction began on or after **July 1, 1992**, must meet the minimum required inspections. If the original construction required inspections, inspections are required when making improvements to the living space.

## **.01 INTRODUCTION**

In accordance with Alaska Statute (AS) 18.56.300, residential housing constructed on or after **July 1, 1992**, must undergo an approved inspection process to be eligible for financing by Alaska Housing Finance Corporation (AHFC). If the inspections were not performed, meeting this requirement may be difficult. Satisfactory completion of a “destructive inspection,” by an authorized inspector **and** an engineer, **may** satisfy this requirement when accompanied by a signed and notarized *Destructive Inspection Certification*. Following are minimum procedures for conducting a “destructive inspection.”

AHFC does not encourage this type of inspection to certify compliance with the law. Therefore, the borrower(s) must acknowledge and accept the inspection report and agree to hold AHFC harmless of any deficiencies in construction of the residence.

## **.02 GUIDELINES**

An authorized inspector and engineer must conduct a physical inspection of the property accompanied by a duly authorized lender’s representative. Using inspection procedures as outlined below, the authorized inspector and engineer determine whether or not a property (that was not initially inspected) complies with statutes. The inspector completes the applicable AHFC Form PUR-102, **and** a *Destructive Inspection Certification*, **if** the property is in compliance.

The authorized inspector retains the following items for a period of five (5) years and makes them available to AHFC upon request; authorized inspector’s and engineer’s written report, continuous video recording of the inspection and stationary color photos as required below.

## **.03 INSPECTION PROCEDURES**

The following aspects of construction must be addressed in the written reports as described.

### **A. Plan Approval**

Plans are reviewed and approved by both the authorized inspector and engineer. The engineer should calculate the adequacy of the size and span of the floor joist and beams. The engineer’s report should address the depth of the footings and adequacy of the foundation for soil conditions. The engineer should state that the improvements are structurally sound and generally meet the state building code.

## B. Footings and Foundation

The engineer must certify that he/she has conducted tests on the footings and foundation walls. Tests must establish that reinforcement steel (rebar) was properly sized and placed in concrete. If the foundation consists of pilings (driven or drilled), a copy of the piling installer's log must be reviewed to verify depth and adequacy for the structure and soil conditions.

## C. Framing, Electrical, Plumbing and Mechanical

Refer to *New Construction Inspection Guidelines, .07 Codes and Appendixes*, for related code information.

### 1. Framing

The report must include photos that show framing connectors are properly installed (i.e. truss hold-down clips), the attic is properly vented, and all flashing required is in place. The authorized inspector must certify that handrails and guardrails meet codes.

### 2. Electrical

The following electrical items require inspection.

- All electrical outlets must be tested and demonstrate continuous sequencing. The electrical panel box should be properly wired and marked; photos should be provided.
- Smoke detectors should be operational and conform to code.
- Any areas where a G.F.C.I. outlet is required should be properly wired.

In addition, a hole must be cut in the sheetrock in at least two locations (other than the laundry room) to inspect wiring at the junction box. Photos evidencing wiring properly stapled at the box should be included.

### 3. Plumbing

Plumbing must conform to the state building code. The inspection must include a water or air pressure test on the waste vent and water system. In the laundry area, bathroom, or kitchen, a hole must be cut in the sheetrock to inspect the wastewater and venting in the plumbing wall. Photos showing the plumbing in this area must be included in the report.

### 4. Mechanical

Mechanical components must meet the state building code and be properly installed.

## D. Insulation/Energy Efficiency

This inspection includes **cutting a hole** in the sheetrock to verify the adequacy of insulation, and that the insulation is properly installed. The Lender's representative may

select the location at random. The inspector must also address the insulation in the floor and ceiling. Photos must evidence satisfactory installation of the vapor barrier. The house must be rated 5 Star or better by the energy rater and the inspector must confirm adequate ventilation for the indoor environment.

#### **.04 FORMS**

##### **A. Form PUR-102**

The authorized inspector completes the applicable Form PUR-102, depending on the construction methods used. This form is recorded along with a *Destructive Inspection Certification*.

##### **B. Destructive Inspection Certification**

The authorized inspector completes a *Destructive Inspection Certification*, which is notarized and recorded along with Form PUR-102. This recorded document serves as public notification that the destructive inspection method was used to certify compliance with the law (AS 18.56.300).

**This certification must be recorded as an addendum to Form PUR-102 07/04**



March 28, 2014

## DESTRUCTIVE INSPECTION

### CERTIFICATION

**By my signature below, I certify that this dwelling meets the construction standards as outlined in AS18.56.300 and 15 AAC 150.097.**

INSPECTOR: \_\_\_\_\_ LICENSE#: \_\_\_\_\_ Date: \_\_\_\_\_  
ACKNOWLEDGMENT STATE OF ALASKA ) ) SS.

\_\_\_\_\_ Judicial District )

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, a Notary Public in and for the State of Alaska, personally appeared \_\_\_\_\_ and \_\_\_\_\_ known to be the person(s) who executed the above instrument freely and voluntarily for the purpose therein mentioned.

My Commission Expires: \_\_\_\_\_

**By my signature below, I certify that this dwelling meets the construction standards as outlined in AS18.56.300 and 15 AAC 150.097.**

ENGINEER: \_\_\_\_\_ Seal: \_\_\_\_\_ Date: \_\_\_\_\_  
ACKNOWLEDGMENT STATE OF ALASKA ) ) SS.

\_\_\_\_\_ Judicial District )

On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me, a Notary Public in and for the State of Alaska, personally appeared \_\_\_\_\_ and \_\_\_\_\_ known to be the person(s) who executed the above instrument freely and voluntarily for the purpose therein mentioned.

My Commission Expires: \_\_\_\_\_