

## **Appendix B**

### **Pennsylvania National Housing Trust Fund Guidelines for New Construction and Rehabilitation**

#### **New Construction and Rehabilitation Standards:**

The goal of the Pennsylvania Housing Finance Agency's (PHFA) National Housing Trust Fund (HTF) program, the Low Income Housing Tax Credit (Tax Credit or LIHTC) program and all of PHFA's housing programs is to provide decent, safe and sanitary housing. At a minimum, this is any residential building that meets the Pennsylvania Uniform Construction Code (PA UCC), all local codes and ordinances, and the requirements of PHFA's Submission Guide for Architects as applicable. The dwellings shall have all of the following features:

- Be structurally sound, weather-tight, and in good repair and contain a safe electrical wiring system adequate for lighting and other customary electrical devices.
- Contain a heating system capable of sustaining a temperature of 70 degrees.
- Be adequate in size related to the number of rooms and area needed to accommodate the number of occupants.
- Include a separate, well lighted and ventilated bathroom that provides privacy to the user and contains a sink, bathtub or shower stall, and a toilet, all in good working order and properly connected to appropriate sources of water and to a sewage drainage system.
- Include a kitchen area that includes a sink, properly connected to potable hot and cold water and to a sewage drainage system, an appropriately sized range and refrigerator, and adequate storage and counter area.
- Contain an unobstructed exit to safe, open space at ground level. If located in a multifamily building, it shall have direct access to a common corridor, with the code required number of means of egress.

The Pennsylvania Uniform Construction Code (PA-UCC) consists of the 2009 International Building Codes as modified by specific portions of the 2015 International Building Codes and as noted below:

The PA-UCC Administration and Enforcement regulation has adopted the following codes for use throughout the Commonwealth of Pennsylvania, effective 12/31/2015. Only the appendices specified after each code name have been adopted (in addition to the code itself).

#### ***International Building Code 2015 Sections:***

- Section 304.1 concerning "Business Group B" uses and occupancies.
- Section 306.2 concerning "moderate-hazard factory industrial, Group F-1" uses and occupancies.
- Section 2902.3 concerning exceptions for "employee and public toilet facilities."
- Section 902.1 (relating to definitions) to the extent that "Automatic Water Mist System" was added.
- Section 904.2 (relating to installation of automatic fire-extinguishing systems).

- Section 904.2.1 (relating to restrictions on using automatic sprinkler system exceptions or reductions).
- Section 904.11 (relating to automatic water mist systems).
- Section 904.11.1 (relating to design and installation requirements).
- Section 904.11.1.1 (relating to general requirements for design and installation).
- Section 904.11.1.2 (relating to actuation).
- Section 904.11.1.3 (relating to water supply protection).
- Section 904.11.1.4 (relating to secondary water supply).
- Section 904.11.2 (relating to water mist system supervision and alarms).
- Section 904.11.2.1 (relating to monitoring).
- Section 904.11.2.2 (relating to alarms).
- Section 904.11.2.3 (relating to floor control valves).
- Section 904.11.3 (relating to testing and maintenance).
- Section 907.2.11.3 (relating to installation of smoke alarms near cooking appliances).
- Section 907.2.11.4 (relating to installation of smoke alarms near bathrooms).
- Chapter 11 is adopted and requires that buildings and facilities also comply with the accessibility requirements found in other chapters of the International Building Code 2015 and in the ICC/ANSI A117.1 2009 Accessible and Usable Buildings and Facilities standard.
- Appendix E (Supplementary Accessibility Requirements) is adopted.

***International Building Code 2009*** (base code, except for accessibility, for all buildings and structures not regulated by the *International Residential Code*)

- Chapter 1 is not adopted (most of its requirements are incorporated in Chapter 403 of the UCC regulation).
- Chapter 27 (Electrical) requires that all electrical components, equipment and systems in buildings and structures covered by the IBC comply with the requirements of NFPA 70-2008, National Electric Code.
- Chapter 30 (Elevators) is not adopted. Elevator requirements are found in Chapter 405 of UCC.
- Only Appendix H (Signs) is adopted.

***International Energy Conservation Code 2015 Sections:***

- Section R202 only to the extent that this section contains the definition of "insulated siding."
- Section R402.2.4 (relating to access hatches and doors).
- Section R402.2.8 (relating to floors).
- Table R402.4.1.1 only to the extent the row for "floors" was amended.
- Section 402.1.3 (relating to r-value computation).

***International Energy Conservation Code 2009 (One & two family detached dwellings and townhouses may instead comply with the Pennsylvania Alternative Residential Energy Provisions developed by the Pennsylvania Housing Research Center)***

***International Existing Building Code 2015***

- Section 406.3 (relating to replacement window emergency escape and rescue opening).

All accessibility provisions as follows:

- Section 107.2 (relating to Temporary Structures and Uses);
- Section 410 (relating to the Prescriptive Compliance Method);
- Section 605 (relating to Repairs);
- Section 705 (relating to Level 1 Alterations);
- Section 801.1 (relating to Level 2 Alterations);
- Section 806 (relating to Level 2 Alterations);
- Section 901.2 (relating to Level 3 Alterations);
- Section 906 (relating to Level 3 Alterations);
- Section 1006 (relating to Change of Occupancy);
- Section 1012.1.4 (relating to Change of Occupancy);
- Section 1012.8 (relating to Change of Occupancy);
- Section 1101.2 (relating to Additions);
- Section 1105 (relating to Additions);
- Section 1204.1 (relating to Historic Buildings);
- Section 1205.15 (relating to Historic Buildings);
- Section 1401.2.5 (relating to Performance Compliance Methods);
- Section 1508 (relating to Construction Safeguards); and
- Appendix B.

***International Existing Building Code 2009***

- Work on existing, non-residential buildings can comply with these code requirements or Chapter 34 of the *International Building Code 2009*.
- All appendices and resource information are adopted.

***International Fire Code 2015 Sections:***

- Section 202 limited to changes to definitions for "Business Group B" and "Automatic Water Mist System."
- Section 902.1 (relating to definitions) to the extent that "Automatic Water Mist System" was added.
- Section 904.2 (relating to relating to installation of automatic fire-extinguishing systems).
- Section 904.2.1 (relating to restrictions on using automatic fire extinguisher systems exceptions or reductions).
- Section 904.11 (relating to automatic water mist systems).

- Section 904.11.1 (relating to design and installation requirements).
- Section 904.11.1.1 (relating to general requirements for design and installation).
- Section 904.11.1.2 (relating to actuation).
- Section 904.11.1.3 (relating to water supply protection).
- Section 904.11.1.4 (relating to secondary water supply).
- Section 904.11.2 (relating to water mist system supervision and alarms).
- Section 904.11.2.1 (relating to monitoring).
- Section 904.11.2.2 (relating to alarms).
- Section 904.11.2.3 (relating to floor control valves).
- Section 904.11.3 (relating to testing and maintenance).
- Section 907.2.11.3 (relating to installation of smoke alarms near cooking appliances).
- Section 907.2.11.4 (relating to installation of smoke alarms near bathrooms).

***International Fire Code 2009***

- Adopted only **to the extent referenced** in the *International Building Code 2009*.

***International Fuel Gas Code 2009***

- Any LPG requirements are superseded by the requirements of Pennsylvania's Propane and Liquefied Petroleum Gas Act (and regulations)
- No Appendices are adopted.

***International Mechanical Code 2015 Section:***

- Section 507.2 of the International Mechanical Code of 2015 (relating to commercial kitchen hoods, "Type 1")

***International Mechanical Code 2009***

- No Appendices are adopted.

***International Performance Code for Buildings and Facilities 2009*** (provides alternative compliance approach)

***International Plumbing Code 2009***

- No Appendices are adopted.

***International Residential Code 2015 Sections:***

- Section N1101.6 only to the extent that this section contains the definition of "insulated siding."
- Section N1102.2.4 (relating to access hatches and doors).
- Section N1102.2.8 (relating to floors).
- Table N1102.4.1.1 only to the extent that amendments were made to the "Floors" row of this table.

- Section N1102.1.3 (relating to r-value computation).
- Table R302.1(1) (relating to requirements for exterior walls).
- Section R316.5.11 (relating to sill plates and headers).
- Section R317.1.4 (relating to wood columns).
- Section R507.1 (relating to decks).
- Section R507.2.4 (relating to deck lateral load connection).
- Section R507.4 (relating to decking).
- Section R507.5 (relating to deck joists).
- Section R507.5.1 (relating to lateral restraint at supports).
- Section R507.6 (relating to deck beams).
- Section R507.7 (relating to deck joist and deck beam bearing).
- Section R507.7.1 (relating to deck post to deck beam).
- Section R507.8 (relating to deck posts).
- Section R507.8.1 (relating to deck post to deck footing).
- Table R507.4 (relating to maximum joist spacing).
- Table R507.5 (relating to deck joist spans for common lumber species).
- Table R507.8 (relating to deck post height).
- Figure R507.2.3(2) (relating to deck attachment for lateral loads).
- Figure R507.5 (relating to typical deck joist spans).
- Figure R507.6 (relating to deck beam span lengths).
- Figure R507.7.1 (relating to deck beam to deck post).
- Figure R507.8.1 (relating to typical deck posts to deck footings).
- Section M1503.4 (relating to "make-up air required" for range hoods).
- Section M1601.4.1 (relating to "joints, seams, and connections" for duct construction) is adopted only with regards to Exception No. 3.

***International Residential Code 2009*** (code for one- and two-family dwellings no more than 3 stories in height)

- Only Appendix G (Swimming Pools, Spas and Hot Tubs) is adopted.

***International Wildland-Urban Interface Code 2009*** (supplementary requirements that may be used to mitigate fire- and life-safety hazards in unique wildland areas)

### **LIHTC and HTF Requirements:**

All Tax Credit and HTF projects are required to be designed by and all drawings must bear the appropriate seal of a Registered Architect or Professional Engineer.

All applications for Tax Credits and HTF must include a certification from the project architect stating that certain threshold criteria will be included in the development. The list of threshold criteria can be seen at:

[http://www.phfa.org/forms/multifamily\\_application\\_guidelines/submission/tab\\_08/tab\\_08\\_04.pdf](http://www.phfa.org/forms/multifamily_application_guidelines/submission/tab_08/tab_08_04.pdf)

## **PHFA Standards:**

### **New Construction and Substantial Rehabilitation:**

Standards for new construction and substantial rehabilitation for projects receiving HTF, HOME funds and an allocation of Tax Credits can be found in the following Tabs of the PHFA Submission Guide for Architects:

Tab 1: PHFA Policies and Procedures

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab01.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab01.pdf)

Tab 2: Architectural Submissions

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab02.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab02.pdf)

Tab 5: Requirements During Construction

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab05.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab05.pdf)

Standards for new construction and substantial rehabilitation projects receiving HTF funds and an allocation of Tax Credits can be found in the following Tab of the PHFA Submission Guide for Architects:

Tab 6: Submission Requirements for LIHTC Developments Not Receiving or Assuming a PHFA Loan

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab06.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab06.pdf)

### **Preservation (Moderate rehabilitation of existing affordable housing):**

Standards for preservation of existing affordable housing receiving HTF, HOME funds and an allocation of Tax Credits can be found in the following Tabs of the PHFA Submission Guide for Architects:

Tab 1: PHFA Policies and Procedures

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab01.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab01.pdf)

Tab 4: Submission Requirements for Preservation Developments

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab04.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab04.pdf)

Tab 5: Requirements During Construction

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab05.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab05.pdf)

Standards for the preservation of existing affordable housing receiving HTF funds and an allocation of Tax Credits can be found in the following Tab of the PHFA Submission Guide for Architects:

Tab 6: Submission Requirements for LIHTC Developments Not Receiving or Assuming a PHFA Loan

[http://www.phfa.org/forms/technical\\_services/2016/2016\\_tab06.pdf](http://www.phfa.org/forms/technical_services/2016/2016_tab06.pdf)

The scope of work for all preservation developments is based on the recommendations of a Project Capital Needs Assessment (PCNA). The PCNA must be prepared by a firm with experience in preparing such reports for the affordable housing industry (HUD, Rural

Development, other Housing Finance Agencies, etc.) and deemed acceptable by PHFA. In addition to evaluating all major building systems and components of the development, the PCNA must include an energy audit prepared by a Building Performance Institute (BPI) certified Multifamily Analyst which evaluates the merits of suggested energy savings upgrades. Measures that prove to save an amount, over their expected life, equal or greater than the cost of their installation, will be included in the scope of work. The PCNA must also include a 20 year Reserve For Replacement schedule to analyze the financial needs of the development. PHFA encourages applicants to include all, or most of, the work shown in the first five years of the RFR in the scope of work of the preservation development. The requirements of the PCNA can be found at:

[http://www.phfa.org/forms/multifamily\\_application\\_guidelines/submission/tab\\_34/tab\\_34.pdf](http://www.phfa.org/forms/multifamily_application_guidelines/submission/tab_34/tab_34.pdf)

### **Lead Based Paint & Other Hazards:**

All preservation and substantial rehabilitation applications are required to perform a Phase I Environmental Site Assessment as part of the application. The results of testing for lead based paint, asbestos, radon and lead in the water supply must be included in the application. Remediation is required to be included in the scope of work if positive results are found for any of these hazards.

### **Health and Safety:**

The following hazards, if discovered during the inspection of the development, must be brought to the building owner's attention and repaired immediately:

- Gas leak or flue leak
- Exposed electrical wiring/missing outlet or switch cover plates
- Evidence of water leaks (storm or domestic)
- Blocked means of egress
- Inoperable fire alarm or smoke detector
- Inoperable egress windows
- Rodent/insect infestation
- Non-functional heating/water heating/electrical system

### **Accessibility:**

All new construction and substantial rehabilitation projects that include a federal funding source are required to comply with Section 504 of the Rehabilitation Act of 1973. All PHFA developments are required to make 5% of the dwelling units accessible to individuals with mobility impairments, and provide devices for the hearing and vision impaired in an additional 2% of the dwelling units. Because PHFA awards ranking points in its LIHTC application for doubling these percentages, the majority of its developments have twice the required number of accessible units.

Additionally the PA UCC requires compliance with the ANSI A117.1-2009 accessibility standards. This is verified at the design stage during drawing review by both the Technical Services staff at PHFA and certified accessibility analysts as part of the building permitting

process. Construction is also inspected by state certified building inspectors and PHFA Technical Services staff to confirm compliance.

### **Disaster Mitigation:**

Fortunately Pennsylvania is not prone to earthquakes or wildfires, and therefore mitigation of these hazards has not been considered. The state is also not prone to a direct hit from a hurricane, but hurricane caused rain has caused extensive flooding on several occasions. Therefore flood mitigation is an important issue. Since 2015, PHFA's LIHTC application and Multifamily Program Guidelines state that tax credits will not be allocated to any development located within the 100 year flood plain. This should greatly diminish the chance of flood damage on any new projects.

However, if an exception is made to this policy, the project shall comply with the management requirements of the Flood Plain Disaster Protection Act of (42 U.S.C. 4106) 4106) and the Pennsylvania Flood Plain Management Act (32. P.S. 679.101 -679.601), which includes the following requirements:

- All flood-prone communities are required by the Pennsylvania Flood Plain Management Act to gain eligibility to participate in the National Flood Insurance Program (16 Pa. Code 38.3(a).
- A flood-prone community is also required by the Pennsylvania Flood Plain Management Act to adopt flood plain management regulations which, at a minimum, comply with requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act (16 Pa. Code 38.4 (a)
- These flood plain management requirements compel flood-prone communities to adopt local ordinances requiring that all new construction and "substantial improvements" of residential structures within identified flood plains be flood-proofed or elevated above the base flood level, depending upon the level of flood plain mapping available to the community. (44 CFR 60.3)
- The term "substantial improvements" is defined as any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the improvement or repair is started. (16 Pa. Code 38.1)

### **State and Local Codes:**

As stated previously all work anticipated through the HTF program will be reviewed by state certified plans examiners, permitted, and inspected by state certified building inspectors. In addition, all work will be reviewed and inspected by PHFA staff. All work will be performed in accordance with the Pennsylvania Uniform Construction Code and PHFA requirements.