



July 29, 2024

U.S. Department of Housing and Urban Development  
Regulations Division, Office of General Counsel  
451 7th Street SW, Room 10276  
Washington, DC 20410-0500

*Via Regulations.gov*

**Re: Comments of the International Code Council on the U.S. Department of Housing and Urban Development’s proposed rule regarding the HOME Investment Partnerships Program; Docket No. FR-6144-P-01**

The International Code Council (“ICC” or “Code Council”) is a nonprofit organization of roughly 700 employees—driven by the engagement of its more than 63,000 members—dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development and implementation of model codes (International Codes) and standards used in design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the International Codes (I-Codes) to set the standards for regulating construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

The Code Council is committed to providing the building industry with the tools necessary to realize safe, sustainable, and resilient buildings and communities. This includes achieving community-level resilience through the effective adoption and implementation of modern building codes and standards to provide building safety in response to increasing hazard events. At the same time, the Code Council is committed to delivering solutions that support the availability of affordable and sustainable housing in recognition of the growing housing crisis.

Federal agencies adopt the I-Codes and ICC standards because they are national “voluntary consensus standards” under Office of Management and Budget (OMB) Circular A-119 and the *National Technology Transfer and Advancement Act* (NTTAA), meaning they are developed in an open forum—with a balance of interests represented and due process—that ultimately, ensures a consensus outcome. All I-Codes are updated every three years. The NTTAA, supplemented by OMB Circular A-119, directs federal agencies to use voluntary consensus standards wherever possible in their procurement and regulatory activities in lieu of expending public resources developing government-unique standards. OMB A-119 “directs agencies to use standards developed or adopted by voluntary consensus standards bodies rather than government-unique standards, except where inconsistent with applicable law or otherwise impractical.”

In recent years, the federal government has increasingly moved towards ensuring federally-assisted infrastructure adheres to modern construction standards. During the prior administration, the Building Codes Task Force of the interagency Mitigation Framework Leadership Group (MitFLG) issued the [2019 National Mitigation Investment Strategy](#). The MitFLG – chaired by the Federal Emergency Management Agency (FEMA) and comprised of another 13 federal agencies and departments as well as state, tribal,



and local officials – made several recommendations concerning the use, enforcement, and adoption of building codes: “[a]rchitects, engineers, builders, and regulators should use the latest building codes for the most up-to-date requirements for structural integrity, mechanical integrity, fire prevention, and energy conservation,” and “[u]p-to-date building codes and standard criteria should be required in federal and state grants and programs.”<sup>1</sup> This work has been continued by the current Administration through the National Initiative to Advance Building Codes (NIABC). The NIABC’s goal is “to ensure that building activities receiving federal funding or financing will meet or exceed the latest building codes.”<sup>2</sup>

The U.S. Department of Housing and Urban Development’s (HUD or the Department) Community Development Block Grant (CDBG) programs require the implementation of a Green Building Standard for replacement and new construction of residential housing, with the ICC-700 National Green Building Standard listed as a compliance path.<sup>3</sup> Building codes and standards have long served as the main tool of governments in setting agreed-upon norms and introducing new technologies and innovation across the building stock, often driven by the latest in building sciences or unfortunate lessons learned from tragic events. With the update to the HOME program, the Code Council urges HUD to utilize industry-consensus codes and standards and streamline requirements with other Department programs to ensure continuity and best practice of housing projects supported by the Department. The Code Council appreciates the opportunity to submit the following comments in response to HUD’s proposed rule to update and streamline the HOME Investment Partnerships Program (HOME program).

#### **1. HUD is encouraged to update its reference to the energy efficiency requirements within the draft rule**

Within the current draft rule, the Department has stated that “pursuant to sections 215(a)(1)(F) and (b)(4) of NAHA ([42 U.S.C. 12745\(a\)\(1\)\(F\)](#) and [\(b\)\(4\)](#)), all newly constructed HOME-assisted housing must meet the energy efficiency codes promulgated by the Secretary in accordance with section 109 of NAHA ([42 U.S.C. 12709](#)).” However, in April of this year, HUD and the Department of Agriculture updated their energy efficiency requirements for federally-assisted housing through the adoption and implementation of the 2021 International Energy Conservation Code (IECC) for single family and low-rise multi-family housing.<sup>4</sup> The 2021 IECC provides cost-effective reduction of energy use over previous editions and includes net-zero appendices for both residential and commercial buildings to provide options for jurisdictions with ambitious climate goals. The 2021 and future editions of the IECC are therefore positioned to support the achievement of the Biden-Harris Administration’s [goal](#) to achieve net-zero emissions economy-wide by 2050.

The Code Council recommends HUD update the reference to the most recent determination requirements outlined in Federal Register Notice 6271–N–03,<sup>5</sup> which became effective on May 28, 2024,

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<sup>1</sup> MitFLG, [National Mitigation Investment Strategy](#) (Aug. 2019).

<sup>2</sup> The White House, [FACT SHEET: Biden-Harris Administration Launches Initiative to Modernize Building Codes, Improve Climate Resilience, and Reduce Energy Costs](#) (June 2022).

<sup>3</sup> HUD, [Allocations for Community Development Block Grant Disaster Recovery and Implementation of the CDBG-DR Consolidated Waivers and Alternative Requirements Notice, 88 Fed. Reg. 3198](#) (Jan. 2023).

<sup>4</sup> Federal Register [Docket No. FR–6271–N–03 “Final Determination: Adoption of Energy Efficiency Standards for New Construction of HUD- and USDA- Financed Housing”](#) (Apr. 2024).

<sup>5</sup> *Id.*



to streamline its requirements across Department programs and minimize confusion of the energy efficiency requirements implemented for HOME and other HUD-assisted housing programs.

- 2. Specific solicitation of comment #2: The Department specifically requests public comment from participating jurisdictions, developers, and other affected members of the public about the green building standards that the Department should establish in the Federal Register. In addition, the Department seeks public comment about stakeholder experiences regarding the percentage increase in the cost of constructing or rehabilitating affordable housing to a green building standard and whether a 5 percent increase in the maximum per unit subsidy limit is sufficient. Finally, the Department requests public comment on whether permitting participating jurisdictions to exceed the maximum per unit subsidy limit by an amount in excess of the additional costs of green building measures (i.e., to provide additional HOME funds to cover a larger portion of other HOME-eligible development costs), would create a sufficient incentive to developers and owners to meet green building standards in projects that would otherwise not be designed to meet those standards.**

The Code Council encourages HUD to recognize existing consensus-based green building standards in the establishment of green building requirements for the HOME program, pursuant OMB Circular A-119 and NTTA policies, to ensure greater use and acceptance in jurisdictions across the nation. Therefore, we recommend recommended that the Department adopt and implement the International Green Construction Code (IgCC)<sup>6</sup> as the basis for the green building requirements of the HOME program.

The IgCC is a collaborative effort of the Code Council, ASHRAE, the Illuminating Engineering Society, and the U.S. Green Building Council (USGBC) to provide adoptable code language and design criteria that goes beyond requirements contained in base codes. The code provides the design and construction industry with a holistic approach to deliver sustainable, resilient, high-performance buildings—facilitating integrated energy conservation, water efficiency, site and material sustainability, land use, and indoor environmental quality. Currently, the IgCC is adopted by the U.S. Department of Defense (DoD) in its Uniform Facilities Guide Specifications and the General Services Administration as the basis for its green building requirements in their P100 Facilities Standards for the Public Buildings Service.

The 2024 edition of the IgCC contains measures that result in better indoor environments, lower impact on natural resources, better neighborhood connections, and improved walkability. The IgCC provisions allow the seamless coordination with either the IECC or ASHRAE Standard 90.1 for ease of adoption. Appendix M of the 2024 IgCC provides options for residential compliance with the National Green Building Standard (ICC 700). The National Green Building Standard is a voluntary consensus standard that applies to the design and construction of residential portions of buildings. The Standard establishes criteria for rating the environmental impact of design and construction practices to achieve conformance with specified performance levels for green residential buildings. In addition, Appendix K aligns IgCC requirements with core elements of versions 4.0 and 4.1 of the LEED rating system developed by the USGBC.

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<sup>6</sup> See [2024 IgCC](#).



A study composed by the University of Miami found that provisions from the IgCC and ICC 700 promote water conservation through safe and sustainable construction in an integrated fashion with the I-Codes. The publication, *Water Conservation and Codes: Leveraging Global Water-Efficient Building Standards to Avert Shortfalls*, concludes that the total annual potential aggregate water conservation for new construction in Houston, Phoenix, Las Vegas, and Des Moines is more than 34 billion gallons of water for American families over a six-year period.<sup>7</sup> Water conservation strategies studied included adoption of more efficient plumbing fixtures; rainwater harvesting, treatment, storage, and reuse; grey water treatment, storage, and reuse; and HVAC condensate catchment, treatment, storage, and reuse. If implemented, these water savings equate to monetary savings for American homeowners. Ultimately, the report demonstrates the enormous potential that building-level approaches – captured in the IgCC and ICC 700 – offer and provides policymakers with a ready-made toolkit to integrate lasting water conservation measures for homeowners in the U.S., particularly as the country faces rising water use and intense threat of water scarcity.

Adoption and implementation of the IgCC for the HOME program would streamline the green building standards with other HUD program requirements. In addition to adopting a consensus-based code that establishes further consistency across HUD programs, the IgCC and ICC 700 have existing training programs to expand professional development to support their effective implementation.

Further, the IgCC also promotes the use of innovative and green building materials which is a goal of the green building incentive pillar of the HOME program update captured in the proposed draft rule. The IgCC includes measures in Chapter 9 on the carbon impacts of materials and the use of environmental product declarations (EPDs) and life cycle analysis. The IgCC also includes material and resource requirements related to resource conservation, impacts on the atmosphere, product transparency, and waste management in addition to reduced life cycle impacts of building materials.

- 3. Specific solicitation of comment #3: The Department specifically seeks public comment on the proposal to require HOME-assisted units comply with NFPA 72, or any successor standard, to use hardwired smoke alarms or sealed or tamper resistant smoke alarms with ten-year non rechargeable, nonreplaceable batteries, that provide notification for persons with hearing loss. The Department is particularly interested in public comment on the feasibility of these requirements in HOME-funded homeownership programs that do not include rehabilitation or construction of housing (e.g., downpayment assistance programs).**

Through the *Consolidated Appropriations Act of 2021*,<sup>8</sup> HUD is required to ensure that carbon monoxide alarms or detectors are installed in each dwelling unit in public housing owned or operated by HUD in a manner that meets or exceeds the requirements established in Chapters 9 and 11 of the 2018 International Fire Code (IFC). In addition, the *Consolidated Appropriations Act of 2023*,<sup>9</sup> HUD is required to ensure that smoke alarms are installed in accordance with applicable codes and standards published by the International Code Council or NFPA and NFPA 72 in all federally assisted housing. Solely applying NFPA 72 is not an option.

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<sup>7</sup> University of Miami, [Water Conservation and Codes](#) (March 2024).

<sup>8</sup> Div. Q, Title I, Sec. 101(b) of [Pub. L. 116-260, the Consolidated Appropriations Act of 2021](#).

<sup>9</sup> Div. AA, Title VI, Sec. 601 of [Pub. L. 117-328, the Consolidated Appropriations Act of 2023](#).



These requirements outlined in the *Consolidated Appropriations Acts of 2021 and 2023* significantly differ from the requirements outlined in the draft rule of the HOME program. Establishing separate requirements for different Departmental programs does not promote efficiency or effective implementation. It also does not achieve HUD's goal to streamline the HOME program with other programs and fails to follow Congress' direction to streamline program requirements with consistent implementation of the trusted voluntary consensus standard – the IFC - which Congress directed HUD to utilize.

Thus, the Code Council strongly encourages HUD to reference the smoke alarms requirements outlined in the International Building Code (IBC), International Residential Code (IRC), and IFC as the basis for the HOME program and other HUD-assisted housing. The IFC is a model consensus-based code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage, and processes by addressing fire prevention, fire protection, life safety, and safe storage and use of hazardous materials. The IFC provides a total approach of controlling hazards in all buildings and sites, regardless of the hazard being indoors or outdoors.

The IBC, IRC, and IFC are recognized as industry-leading national voluntary consensus standards and are widely used by government agencies and across the nation by jurisdictions. For post-disaster recover, FEMA currently requires all construction meet the latest editions of suite of the I-Codes, including the fire safety provisions of the IBC, IRC, and IFC.<sup>10</sup> GSA's P100 also requires design and construction to adhere to the fire safety provisions of the IBC, IRC, and IFC for GSA owned and managed buildings. In addition, the Smithsonian Institution adopts the most recently published edition of the IBC and IFC as the basis for the Smithsonian Design Guidelines (SDS) in relation to life safety and fire protection.<sup>11</sup> The IFC is recognized as the industry standard for fire safety, as it is also adopted or in use in 41 states across the nation.

Where the IBC, IRC, and IFC are adopted at the jurisdictional level, these codes serve as the triggering document for applicable standards for smoke alarm installation requirements. If HUD intends to require NFPA 72 for smoke alarm requirements, it is imperative to adopt the IBC, IRC, and IFC as the triggering documents for its effective utilization. The 2024 IBC,<sup>12</sup> IRC,<sup>13</sup> and IFC<sup>14</sup> all contain references to NFPA 72 for fire alarm and detection systems for specific installation requirements. Where there are differing requirements between the codes and NFPA 72, the requirements of the IBC, IRC, or IFC would take precedent. Adoption of the IBC, IRC, and IFC would streamline the process of triggering the requirements of NFPA 72, in coordination with how jurisdictions adopt and implement codes and industry standards, and would create greater consistency of best practices for smoke alarm requirements throughout Departmental programs.

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<sup>10</sup> FEMA, Recovery Interim Policy, [FP- 104-009-11 Version 2](#) (2020).

<sup>11</sup> Smithsonian Institution, [SDS Volume 1 – Design Guidelines and Technical Sections](#) (October 2021).

<sup>12</sup> See [Section 907 of the 2024 IBC](#).

<sup>13</sup> See [Section R310 of the 2024 IRC](#).

<sup>14</sup> See [Section 907.2.11 of the 2024 IFC](#).

The requirements within NFPA 72 addressing hearing impairments are not specifically referenced in the I-Codes currently as the technology is limited in availability. Such limitations within NFPA 72 will make implementation difficult.

The IFC, IBC, and IRC require that smoke alarms be hardwired with battery backup unless being installed in a building that has never been provided with smoke alarms or has only previously contained battery powered smoke alarms. The allowance to install sealed tamper resistant non replaceable 10-year battery operated smoke alarms are intended to be limited to existing buildings that do not currently contain hardwired smoke alarms.

It is also unclear whether the sealed tamper resistant non replaceable 10-year battery smoke alarms would likely not be able to comply with the requirements in NFPA 72 for hearing impairments.

**4. Specific solicitation of comment #4: The Department specifically seeks public comment on the proposal to require that a participating jurisdiction inspect at least 20% of the HOME-assisted units during its ongoing on-site inspections of rental housing.**

The Code Council recommends HUD adopt the most recent version of the International Property Maintenance Code (IPMC)<sup>15</sup> as the basis for on-site inspections of rental housing for the HOME program. The IPMC is a model code that regulates minimum maintenance requirements for existing buildings, including for basic equipment, plumbing, mechanical, electrical, light, ventilation, heating, sanitation, and fire safety. Responsibility is fixed among owners, operators, and occupants for code compliance. The IPMC provides for the regulation and safe use of existing structures in the interest of the social and economic welfare of the community. The IPMC is updated every three years, allowing it to keep pace with changing technology, building science, and improved understanding of life safety risks.

The IPMC is a national “voluntary consensus standard” under OMB Circular A-119 and the NTTAA, meaning it is developed in an open forum—with a balance of interests represented and due process—that, ultimately, ensures a consensus outcome. Currently, the IPMC is adopted or in use in 40 states and more than 1,000 jurisdictions across the nation. The Department of Defense has also implemented a uniform code of basic housing standards to regulate safety, comfort and habitability of DoD government-owned family housing built on the IPMC.<sup>16</sup> Adoption of the IPMC as the basis for inspections of rental housing for the HOME program would strengthen maintenance practices, given the many instances where the IPMC exceeds HUD’s existing requirements; improve compliance by standardizing federal, state, and local maintenance requirements; and better integrate maintenance practices with existing construction codes. Additionally, there is a ready workforce of inspectors trained to the IPMC, who could also be easily certified to meet the inspection requirements of the HOME program.

**5. The Code Council encourages HUD to support increased use of off-site construction as an innovative building method through incorporation of standards**

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<sup>15</sup> See [2024 IPMC](#).

<sup>16</sup> See Div. B, Title XXX, Sec. 3051 of [Pub. L. 116-92, the National Defense Authorization Act for Fiscal Year 2020](#) and Div. B, Title XXVIII, Subtitle B, Sec. 2818 of [Pub. L. 116-283, the National Defense Authorization Act for Fiscal Year 2021 \(PL 116-283\)](#).





HUD should encourage the increased use of off-site construction to reduce project waste, costs, and community disruption while enhancing job site safety for new HOME program housing projects. The Code Council and Modular Building Institute (MBI) developed ICC/MBI Standards 1200 and 1205 to provide a consistent process for assuring off-site construction meets design requirements. The HUD Research Roadmap for Off-Site Construction recognizes the important role of standards in facilitating the expansion of off-site construction.<sup>17</sup> Recognition of the standards within the HOME program would facilitate their expanded use, the realization of off-site construction's benefits, and demonstrate HUD's commitment to efficient design and construction processes that aid housing affordability and availability challenges.

Off-site (modular) construction or pre-fabrication, the design and delivery of buildings using an industrialized and manufactured-style approach, has been identified as a core strategy in addressing multiple building industry and societal challenges—including sustainability, workforce availability, and supply chain disruptions. Off-site construction can deliver projects 20- to 50-percent faster than traditional site-built methods, while also providing cost savings of up to 20-percent.<sup>18</sup> In addition to cost-savings benefits, off-site construction can reduce material waste while enhancing building quality and improving the safety of builders. Off-site constructed projects can additionally provide embodied carbon savings up to 45%, creating substantial sustainability benefits to communities worldwide.<sup>19</sup>

Numerous government and industry organizations have recognized off-site construction as a strategy to address construction industry challenges. President Biden recognized this opportunity in the Administration's Housing Supply Action Plan,<sup>20</sup> while HUD and the U.S. Department of Energy (DOE) are supporting research to help expand its use.<sup>21</sup> GSA's 2024 P100 design requirements now require ICC/MBI Standards 1200 and 1205 for projects using off-site construction.

To incentivize increased use of off-site construction, building regulatory programs must be designed to effectively inspect and approve factory-built components. The International Code Council and Modular Building Institute (MBI) have developed the *ICC/MBI Off-site Construction Standard 1200: Planning, Design, Fabrication, and Assembly*<sup>22</sup> ("1200"), and *ICC/MBI Off-site Construction Standard 1205: Inspection and Regulatory Compliance*<sup>23</sup> ("1205"), which cover the entire off-site construction process and capture best practices, to support a consistent approach to verifying compliance. The standards

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<sup>17</sup> HUD Office of Policy Development and Research, [Offsite Construction for Housing: Research Roadmap](#) (Jan. 2023)

<sup>18</sup> McKinsey & Company, [Modular construction: From projects to products](#) (June 2019); Galante, et. al., [Building Affordability by Building Affordably: Exploring the Benefits, Barriers, and Breakthroughs Needed to Scale Off-Site Multifamily Construction](#), Turner Center for Innovative Housing at UC Berkley (Mar. 2017).

<sup>19</sup> Lowe, T., [Study by Cambridge University and Napier University found 28,000 tonnes of carbon were saved on two modular schemes in London](#), Housing Today (2021).

<sup>20</sup> The White House, [Press Release: President Biden Announces New Actions to Ease the Burden of Housing Costs](#), (May 16, 2022).

<sup>21</sup> DOE, Advanced Building Construction Initiative, <https://www.energy.gov/eere/buildings/advanced-building-construction-initiative>; Department of Housing and Urban Development, The HUD Off-site Construction Research Roadmap, <https://www.huduser.gov/portal/pdredge/pdr-edge-trending-072622.html>.

<sup>22</sup> *2021 ICC/MBI 1200 Standard for Off-site Construction: Planning, Design, Fabrication and Assembly*, available at [ICC Digital Codes](#) (Accessed Sept. 10, 2023).

<sup>23</sup> *ICC/MBI Off-site Construction Standard 1205: Inspection and Regulatory Compliance*, available at [ICC Digital Codes](#) (Accessed Sept. 10, 2023).



apply to all componentized, panelized, and modularized elements in both commercial and residential buildings, except HUD-regulated manufactured housing.<sup>24</sup>

The standards integrate with existing design requirements and codes and include procedures for plan review and in-factory inspection and approval. The standards were developed by a diverse committee of experts including state program administrators, manufacturers, third-party agencies, and designers. They meet the requirements for private-sector developed standards as outlined in the NTTAA and OMB A-119. These standards sit alongside existing building codes, standards and owner design requirements to provide the process for verifying an off-site construction project's compliance with building codes and standards. Integrating ICC/MBI Standards for Off-site Construction into the HOME program will reduce costs during construction through decreased project timelines, while enhancing sustainability and resilience for HUD-assisted housing.

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Thank you for the opportunity to provide comments. If you have any questions concerning these recommendations, please do not hesitate to contact us.

Sincerely,

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<sup>24</sup> Manufactured housing is a form of off-site construction, but its design and assembly is regulated by HUD. Local code officials retain responsibility to site work, installation, and accessory structures. ICC/MBI 1200 and 1205 do not apply to manufactured housing.