



# ~~2021~~ 2022 DRAFT

## Design & Architectural Standards

Office of Multifamily Housing | ~~December 2020~~ November 2021

# Contents

A. Introduction and Scope	4
Applicability	4
Funding Programs	4
Exceptions	5
Notice & Disclaimer	5
Penalties	5
B. Definitions	5
OHFA Square Footage Calculation	7
C. Code Compliance	8
D. Lead-Based Paint Hazard Reduction	8
Applicability	8
Requirements	9
Additional Resources	9
E. Radon Reduction and Prevention	9
Applicability	10
Requirements	10
Exception for high-rise structures	10
Testing	11
Professional Qualifications	11
Testing Protocols	11
Additional Resources	11
F. Adaptability & Accessibility	11
G. Universal Design	12
H. Sustainability	12
Energy Efficiency Certification	13
Green Building Certification	13
Requirements for Rehabilitation projects unable to obtain the above certifications	13
I. Minimum Rehabilitation Requirements	13
J. Site and Exterior Requirements	14
K. Interior Requirements	16
L. Architectural Submission and Review Process	20
Submissions and Correspondence	20
Review Process	20
Required Documents - Preliminary Architectural Submission	20
Required Documents - Final Architectural Submission	21
M. Monitoring & Compliance	22

Construction Monitoring .....	22
Notification of Construction Start.....	22
Quarterly Construction Monitoring Reports .....	22
Construction Completion .....	23
APPENDIX A: EXCEPTION REQUESTS .....	24
New Construction .....	24
Rehabilitation and Adaptive Reuse .....	24
Historic Preservation .....	24
Submission Requirements.....	24
Deadlines .....	25
APPENDIX B: UNIVERSAL DESIGN COMPONENTS .....	26
Entry .....	26
Interior Stairs and Hallways .....	26
Faucets.....	26
Electrical.....	26
Bathrooms .....	27
Kitchen.....	27
Closets/Storage .....	27
APPENDIX C: OHFA EUL TABLE .....	29
APPENDIX D: HOME PROPERTY STANDARDS.....	46
APPENDIX E: NHTF PROPERTY STANDARDS .....	50
APPENDIX F: CBDG-DR PROPERTY STANDARDS .....	59
A. Introduction and Scope .....	3
B. Definitions .....	4
C. Code Compliance .....	6
D. Lead-Based Paint Hazard Reduction .....	6
E. Radon Reduction and Prevention .....	7
F. Adaptability & Accessibility .....	9
G. Universal Design .....	10
H. Sustainability .....	10
I. Minimum Rehabilitation Requirements.....	11
J. Site and Exterior Requirements.....	12
K. Interior Requirements .....	14
L. Architectural Submission and Review Process .....	18
M. Monitoring & Compliance .....	20
APPENDIX A: EXCEPTION REQUESTS .....	22
APPENDIX B: UNIVERSAL DESIGN COMPONENTS .....	24
APPENDIX C: OHFA EUL TABLE .....	27

APPENDIX D: HOME PROPERTY STANDARDS .....	34
APPENDIX E: NHTF PROPERTY STANDARDS .....	39
APPENDIX F: CBDG-DR PROPERTY STANDARDS .....	48

## A. Introduction and Scope

The following Design and Architectural Standards (“the Standards”) apply to all Ohio Housing Finance Agency (OHFA) multifamily affordable housing ~~developments including but not limited to those funded with the Housing Tax Credit and Housing Development Assistance Programs (HDAP). Unless otherwise stated,~~ ~~†~~ These Standards represent the minimum requirements necessary to receiving OHFA funding. Standards may be increased or modified by programmatic requirement or incentive; applicants ~~shall~~ should consult the relevant program guidelines for further information. ~~Development teams are encouraged to exceed these Standards and implement creative solutions to best serve residents’ needs.~~

The intent of these Standards is to:

- Ensure consistency in the design approval process;
- Promote the use of durable materials that reduce long-term maintenance costs;
- Create a healthy living environment for residents of all backgrounds and abilities;
- Provide options for meeting requirements that can be tailored to location and population being served;
- Enhance energy efficiency to reduce operating costs; and
- Appropriately balance high quality materials with cost containment principles.

### Applicability

#### *Funding Programs*

These Standards apply to all new construction, rehabilitation, and adaptive reuse developments seeking funding through any of the programs administered by the OHFA Office of Multifamily Housing.

~~If a standard as noted in this document is not required for a specific funding program, it will be noted as such.~~

## Exceptions

All program participants ~~shall~~must conform to these requirements unless waived by OHFA in writing. OHFA will accept requests for exception to specific requirements as noted throughout the document and as summarized in [Appendix A](#). Additionally, OHFA will evaluate certain aspects of the Standards that may require modification in order to meet the unique site, design or use of the development. In this event, OHFA will consider modification requests on a case by case basis.

All requests for exceptions ~~shall~~must be submitted using the [OHFA Exception Request form](#), ~~shall~~must include reasonable justification for the exception, and ~~shall~~must be submitted to OHFA on or before the date indicated in the respective program calendar. The OHFA staff architect will review requests and make a recommendation to the management team to accept, deny, or modify the exception. A final determination will be made by OHFA by the date indicated in the program calendars.

## Notice & Disclaimer

All requirements ~~enumerated herein~~ are exclusive of federal, state, and local law or regulation that may further dictate design requirements. If there is a conflict between the requirements of applicable codes and/or these Standards, the most stringent requirement will prevail. During the construction process, owners/developers and/or architects will be asked to certify compliance with applicable regulations.

Nothing in these Standards ~~shall~~must be construed to waive, override, modify, or extinguish any legal or regulatory responsibility, including those governing accessibility issues. OHFA will not certify project adherence to building code or other legal or design requirements. OHFA ~~shall~~must not, by the execution or performance of any architectural review function, assume liability or otherwise become responsible for any owner, developer, architect, construction contractor or other person's obligation; applicants and funding recipients are explicitly advised to seek independent legal advice regarding non-OHFA design and construction requirements particularly as they relate to accessibility.

## Penalties

Violations of the requirements set forth in these Standards, failure to honor commitments made in the application process, or other instances of noncompliance with OHFA requirements may result in any or all of the non-exhaustive sanctions as outlined in the ~~2020-2021 Qualified Allocation Plan~~2022-2023 Qualified Allocation Plan.

## B. Definitions

Unless otherwise noted, all definitions ~~shall~~must be the same as the building code applicable to the construction type.

**Adaptive Reuse:** The renovation and reuse of an existing structure for a purpose other than that which it was originally built or designed for.

**Circulation Space:** The minimum path inside a building for access to living units, storage areas, common areas, ingress and egress areas, and other spaces designed for resident use.

- Examples: Hallways, stairways, and areas that lead to other rooms

**Common Space:** A room or space outside the residential living unit designed for resident use that does not impose a usage fee or participation in an activity for free enjoyment of the space.

- Examples:

- Circulation space- hallways, elevators, lobby, etc.
- Community space- meeting rooms, community rooms, multipurpose rooms, fitness center, etc.
- Property management space- management offices

**Components:** A portion of a building system, piece of equipment, or building element.

**Dedicated Program Space:** A room or space outside the residential living unit designed exclusively for tenant use that has a fixed, program-driven purpose. These spaces are not considered part of Common Space.

- Examples: Counseling space, wellness and health clinic areas, day care centers

**Design and Construction Features Form (DCFF):** The form submitted with the application that states all of the design-related features that will be included in the project. Compliance throughout the rest of the project period is checked against this information. The DCFF can be found on OHFA's [Guidelines, Applications, and Forms webpage](#).

**Expected Useful Life (EUL):** The average amount of time in years that an item, component or system is estimated to function without material repair when installed new and assuming routine maintenance is practiced. EUL values are used in a capital needs assessment when assessing the current condition and remaining useful life of a system or component.

**Major Building Component (MBC):** Major refers to the importance of the component and the extent of the replacement (i.e. roof structures, wall or floor structures, foundations and plumbing, central heating and air conditioning, or electrical systems). The element must be significant to the building and its use, normally expected to last the useful life of the building, and not minor or cosmetic. Total replacement is not required but the greater part (at least 50%) must be replaced. The term provides a great deal of latitude, and good judgement is necessary and expected. OHFA architectural staff and OHFA Multifamily Development Staff will make the determination.

**Major Building Systems (MBS):** Interacting or independent components or assemblies, which form single integrated units that comprise a building and its site work, ~~such as structural, thermal/moisture envelope, plumbing, HVAC, electrical, etc.~~

~~MBS contain components and/or subcomponents. More than 50% of each SYSTEM'S components/subcomponents must need replacement before an MBS is eligible for replacement. The OHFA EUL table is grouped by typical MBS and their subcomponents.~~

**Net Rentable Area:** The sum of the unit area, balcony area, and tenant storage area.

**New Construction:** Site preparation for, and construction of, entirely new structures whether or not the site was previously occupied.

**Physical Capital Needs Assessment (PCNA):** An inspection and resulting plan for a property that provides detail on the property's current overall physical condition and identifies immediate physical needs, significant deferred maintenance, and an opinion of costs to remedy physical deficiencies.

**Remaining Useful Life (RUL):** Subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that an item, component, or system is estimated to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component,

or system, the quality of the initial installation, the quality and amount of preventive maintenance exercised, climatic conditions, ~~extent and extent~~ of use, ~~etc.~~

**Safe Harbor:** An objective and recognized standard, guideline, or code that, if followed without deviation, ensures compliance with specific requirements. For purposes of the Standards, the term safe harbor is used in the context of the standards used for compliance with design and construction requirements of the Fair Housing Act and the standards used for compliance with Section 504.

**Substantial Rehabilitation:** ~~To be considered substantial rehabilitation the following conditions must be met: 1) when the required repairs, replacements, and improvements involve the replacement of two or more major building components, and 2) the hard construction dollars of rehabilitation per unit equals \$40,000 or more. Required repairs, replacements, and improvements that involve the replacement of two or more major building systems that have demonstrated need for replacement. The need to replace items must be documented in the PCNA and accepted by OHFA. An item's EUL/RUL cannot be the sole factor in demonstrating need to repair or replace. Total replacement is not required, but the greater part (at least 50 percent) must be replaced and that part must have used at least 75% of its EUL or have only 25% RUL.~~

**Support Space:** A room or space outside the residential living unit that is not intended for resident use.

- Examples: Mechanical areas, janitor closets, supply and mechanical storage areas

## OHFA Square Footage Calculation

Developments must use the following standards for measuring square footage:

- **Multifamily buildings**
  - Building Owners and Managers Association (BOMA) - Multi-Unit Residential Standard, Gross Method
- **Single-family, 1, 2, or 3-family dwelling, or townhome buildings**
  - BOMA - Gross Areas Standard

The area calculations for either of the above must include 100% of the building in which the project is contained regardless of whether that space is leased or condominiumized to another entity, and includes:

- All buildings, including those with HUD Building Identification Numbers (BINs)
- Free-standing community buildings
- Maintenance buildings and sheds
- Picnic shelters/gazebos
- Garages
- Carports
- Porches
- Commercial space
- Market rate unit space
- Manager unit space
- Common space
- Dedicated Program Space
- Tenant storage

The calculation should not include:

- Trash enclosures
- Concrete patios without roofs
- Sidewalks

All square footages must be calculated and certified in the Affordable Housing Funding Application (AHFA) or Gap Financing Application (GFA) by the Architect of Record.

## C. Code Compliance

All ~~developments shall~~developments must conform to the below requirements:

- **Developments with four or more units:**
  - [Ohio Administrative Code 4101:1 Board of Building Standards: Ohio Building Code](#), including any and all referenced codes
- **Developments with three or fewer units:**
  - [Ohio Administrative Code 4101:8 Board of Building Standards: Residential Code of Ohio](#), including any and all referenced codes

All developments must also conform to the requirements set forth in the following, as applicable:

- ~~Ohio Development Services Agency Residential Rehabilitation Standards~~[Ohio Department of Development Residential Rehabilitation Standards](#)
- Local codes, zoning codes, and fire codes as required by the jurisdiction or funding source.
- If receiving funding from the **HOME Investment Partnerships Program**, developments must meet all requirements as outlined in [24 CFR §92.251 – Property Standards](#) (also [Appendix D](#)).
- If receiving funding from the **National Housing Trust Fund**, developments must meet all requirements as outlined in [24 CFR §93.301 – Property Standards](#) (also [Appendix E](#)).
- If receiving funding from the **Community Development Block Grant – Disaster Recovery program**, developments must meet all requirements as outlined in [83 FR 5844](#) (also [Appendix E](#)).

## D. Lead-Based Paint Hazard Reduction

OHFA is committed to the reduction of lead-based paint hazards in housing throughout Ohio. Deteriorating lead-based paint and its resulting lead dust are the most common causes of elevated blood lead levels in children in Ohio. Because of Ohio's aging housing stock, many residents are susceptible to lead hazards. ~~27%Over 25%~~ of housing units in Ohio were built before 1950, when the first laws banning lead-based paint were enacted. ~~67%Over two-thirds~~ of housing units in Ohio were built in 1979 or earlier, pre-dating the federal ban on lead in house paint.

### Applicability

The requirements in this section apply to all properties seeking OHFA funding for rehabilitation of a pre-1978 structure.

Certain properties may be exempt and are able to seek an exception to this requirement:

- ~~1.~~ Properties found not to have lead-based paint during earlier testing that meets the requirements of prior evaluations.
- ~~2.~~ Properties where all lead-based paint has been identified and removed using approved methods.
- ~~3.~~ Properties in an area where state and local governments banned lead-based paint prior to January 1, 1978.

Additionally, certain federal and state funding sources already require developments utilizing their funding to adhere to program-specific requirements for the reduction of lead-based paint hazards. Developments subject to these program-specific requirements should continue to follow the applicable guidance related to lead-based paint.



## Requirements

Developments must comply with the requirements outlined in the [HUD Lead Safe Housing Rule](#) (24 CFR 35), specifically subparts A, B, J, and R as well as any other subparts applicable to the project. In general, this means projects must:

1. Conduct an evaluation of lead-based paint hazards (i.e., a risk assessment, paint inspection, or a combination of the two).
  1. For properties in good condition, a lead hazard screen risk assessment may be performed first to determine whether a full risk assessment is necessary.
2. Control identified lead hazards per Ohio Department of Health and HUD hazard reduction requirements.
3. Pass clearance testing of work area prior to re-occupancy.
4. Inform occupants of evaluation and hazard control activities and results, and provide the HUD/EPA Lead Hazard information disclosure pamphlet.

Develop a lead hazard control plan for the property which includes an ongoing lead-safe maintenance program.

Additionally, developments must meet all other local, state, and federal requirements related to lead-based paint as may apply including those related to disclosure, professional qualifications, lead-safe work practices, etc.




## Additional Resources

1. [HUD Lead Safe Housing Rule \(24 CFR 35\)](#)
2. [HUD Guidelines for the Evaluation and Control of Lead-based Paint in Housing](#)
3. [HUD/EPA Lead Disclosure Rule](#)
4. [EPA's Lead Renovation, Repair and Painting Rule \(RRP\) Rule](#)
5. [OAC Chapter 3701-32: Lead Hazard Abatement](#)
6. [ORC 5302.30: Property disclosure form required for all residential real property transfers](#)
7. [ODSA's Residential Rehab Standards \(RRS\): Chapter 7 - The Elimination of Lead-Based Paint Hazards and Appendix 7-A Lead-Based Paint Requirements and Guidance](#)

## E. Radon Reduction and Prevention

Radon is a cancer-causing, radioactive gas. It comes from the natural (~~radioactive~~) breakdown of naturally-occurring ~~elements such as uranium, thorium, or radium~~ in rock, soil and water. Radon can get into the air in buildings by traveling through the ground and through seams, joints, utility penetrations and cracks in building foundations and slabs. Eventually, it decays into radioactive particles that can become trapped in the lungs when inhaled. As these particles decay, they release radiation that can damage lung tissue and lead to lung cancer.

The U.S. Environmental Protection Agency (EPA) has divided states and counties into [three radon risk zones](#).

-  Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
-  Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
-  Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Elevated levels of radon can be found in any of the three zones, but buildings in Zone 1 are at particularly

high risk for having elevated levels, and the need for addressing radon in those locations is of greatest importance. As seen in the map, all of Ohio falls into either Zone 1 or Zone 2.

The EPA has developed an action level for radon of 4 picocuries per liter of air (pCi/L). A picocurie is a measure of radioactivity. If a building's indoor radon concentration is at or above 4 pCi/L, mitigation is recommended. If the concentration is between 2-4 pCi/L, mitigation should be considered.

## Applicability

The requirements in this section apply to all OHFA-funded developments, including both new construction and rehabilitation/adaptive reuse.

Additionally, certain federal and state funding sources already require developments utilizing their funding to adhere to program-specific requirements for radon testing and mitigation (for example, any development subject to HUD's environmental review regulations at 24 CFR Part 50 and Part 58). Developments subject to these program-specific requirements should continue to follow the applicable guidance related to radon.

## Requirements

Developments must incorporate radon-resistant construction techniques into their project. Radon-resistant construction techniques include:

1. a gas permeable layer such as gravel beneath the lowest building floor slab,
2. a vapor retarding layer on top of the permeable layer,
3. a vertical vent pipe from the permeable layer through the roof to vent outside,
4. sealing and caulking of all cracks, joints and penetrations in the slab or basement, and
5. installation of a junction box in the attic or highest interior space for use with an in-line vent fan if one is required for future active removal of radon.

Once construction/renovation is complete, but prior to occupancy, radon testing must be conducted in accordance with ANSI/AARST MAMF-2017, or ~~the most current testing standard~~ most current testing standard for the applicable structure. This includes testing in 100% of all ground-contact dwelling units and non-residential ground-contact rooms, as well as 10% of the upper floor dwelling units (with at least one unit tested on each floor) to determine the need for installation of exhaust fans (i.e. "active" removal).

If any sample result from the post-construction sampling meets or exceeds 4.0 pCi/L of radon, exhaust fans must be installed to convert the passive radon removal systems to active removal systems. Any area with test results above the action level must be retested after installation of fans until satisfactory results are obtained.

### *Exception for high-rise structures*

For projects involving the rehabilitation of a high-rise building, pre-construction radon testing may be conducted first to determine the need for a radon mitigation system.

1. If any result of the pre-construction testing is at or above the threshold (4.0 pCi/L), installation of a radon mitigation system will be required.
2. If the highest result of testing conducted before construction is between 2 and 4 pCi/L, the project can install a radon mitigation system building-wide or test again after construction is complete but prior to occupancy.
3. If all results are less than 2 pCi/L before construction or less than 4 pCi/L after construction, no mitigation system is required.

## Testing

### Professional Qualifications

[Ohio Administrative Code, Chapter 3701-69](#) sets forth all requirements for qualification as a radon tester, mitigation specialist, or mitigation contractor, as well as standards of conduct for each type of qualified professional. Radon testing, mitigation, and laboratory work for developments to be funded with OHFA resources must be performed by individuals who meet the certification and licensure requirements as outlined in OAC 3701-69.

### Testing Protocols

Radon testing must be performed according to OAC 3701-69-07, *Standards of conduct for radon testers*, as well as current testing protocols for the applicable building type. The current testing protocol for multifamily buildings is the ANSI/AARST “Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings (MAMF-2017)”, but the most current testing standard for the applicable building type, as of the date the testing occurs, should be followed.

Current testing protocols and standards can be found on the [EPA’s Current Radon Standards of Practice](#) webpage.

## Additional Resources

EPA provides the following helpful resources for radon-resistant construction:

1. [Radon-Resistant Construction Basics and Techniques](#)
2. [Builder and Contractor Resources for Radon-Resistant New Construction \(RRNC\)](#)
3. [Building Codes and Standards for Radon-Resistant New Construction \(RRNC\)](#)

The following are resources for radon mitigation systems in existing buildings:

- [Radon Mitigation Standards for Multifamily Buildings \(RMS-MF 2018\)](#)
- [ASTM E2121 – 13: Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings](#)

## F. Adaptability & Accessibility

Developments may be subject to one or more of the below laws, depending on the date of construction, type of space, funding sources utilized, and other project-specific information. The burden of compliance rests with the person or persons who design and construct covered multifamily dwellings. In the application, during the construction process, and at project closeout owners/developers and/or architects will be required to certify compliance with applicable regulations.

### Fair Housing Amendments Act of 1988 (FHA)

- Applicable to all new multi-family housing consisting of four or more dwelling units per building built for first occupancy after March 13, 1991.
- If applicable, applicant must state in the AHFA which safe harbor will be used to demonstrate compliance with the Act’s design and construction requirements.

### Americans with Disabilities Act (ADA), Title II and Title III

- Applicable to common areas open for public use, such as a property management or rental office.
- If applicable, applicant must verify in the AHFA that the project will be constructed in accordance with the 2010 ADA Standards for Accessible Design.

### Section 504 of the Rehabilitation Act of 1973 (Section 504)

- Applicable to recipients of federal financial assistance, however, OHFA requires that all developments receiving OHFA funding meet the accessibility requirements of Section 504. This includes, but is not limited to:
  - ~~a.~~ Providing 5% of the dwelling units (10% of units in Competitive HTC developments), or at least one unit, whichever is greater, as accessible for persons with mobility disabilities;
  - ~~b.~~ Providing an additional 2% of the dwelling units, or at least one unit, whichever is greater, as accessible for persons with hearing or visual disabilities;
  - ~~c.~~ Providing accessible units in a variety of unit configurations and distributed throughout the development and buildings; and
  - ~~d.~~ Ensuring accessible units have comparable features to non-accessible units, such as kitchen and bathroom storage.
  - ~~e.~~ Providing accessible site features and common areas including but not limited to dumpsters, outdoor grills, parking, play areas, and community shelters.
    - ~~f.~~ An accessible route to the dumpster is not required if the building includes an interior trash chute or trash room for residents, and residents are therefore not required to take their trash to a dumpster outside of the building.
- Applicant must state in the AHFA which standard will be used to demonstrate compliance with the requirements of Section 504 (Uniform Federal Accessibility Standards, 2010 ADA Standards, or an equivalent standard as defined in HUD's Deeming Notice).

When more than one law and accessibility standard applies, it is currently necessary for the recipient to determine on a section-by-section basis which standard affords greater accessibility.

Additionally, all projects must to comply with the accessibility requirements as outlined in the **Ohio Building Code, Chapter 4101:1-11**, which includes the use of **ICC/ANSI A117.1-2009** for the design and construction of accessible units.

## G. Universal Design

As defined by the Center for Universal Design, Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. OHFA recognizes the need to create housing that includes Universal Design features while maintaining aesthetics and affordability.

**Certain elements of Universal Design is encouraged but not are required in all OHFA-funded HTC developments.** ~~For developments seeking points for Universal Design in the Competitive HTC program only, a~~ list of mandatory and optional Universal Design components can be found in [Appendix B](#) of these Standards, and in Appendix D of the ~~2020-2021 QAP~~2022-2023 QAP. Applicants will designate which, ~~if any,~~ components of Universal Design will be incorporated into the development in the AHFA. The architect will also be required to clearly identify the location of each component in the architectural drawings. Before issuance of Form 8609, the applicant will be required to provide documentation to OHFA evidencing the required number of units meet the Universal Design commitment made in the application.

## H. Sustainability

In addition to meeting all energy efficiency requirements as stated in the Ohio Building Code or Residential Code, all multifamily developments must obtain one of the below energy efficiency or green building certifications. All HTC developments must obtain one of the listed green building certifications.

Evidence of final certification from a Home Energy Rating System (HERS) rater or the applicable green building rating system is required upon construction completion. At OHFA's discretion, exceptions may be

granted for an otherwise qualified and licensed professional to verify compliance with these standards in projects unable to retain a HERS rater in their area.

## Energy Efficiency Certification

- ENERGY STAR certification, buildings permitted prior to 1/1/2021:
  - ENERGY STAR Multifamily High Rise program (Performance Path or Prescriptive Path);
  - ENERGY STAR Certified Homes program; or
  - ENERGY STAR Multifamily New Construction program, National Version 1.
- ENERGY STAR certification, buildings permitted on or after 1/1/2021:
  - ENERGY STAR Multifamily New Construction program, National Version 1

## Green Building Certification

Developments must utilize the most current version of the below certifications. The current version is the version applicable at the time of project application to the certifying body.

- Enterprise Green Communities
- Leadership in Energy & Environmental Design (LEED)
- ICC 700 National Green Building Standard (NGBS)

### ***Requirements for Rehabilitation projects unable to obtain the above certifications***

For projects that consist of rehabilitation and that are unable to meet the requirements to obtain one of the above energy efficiency or green building certifications, the project may use the [OHFA Limited Scope Rehabilitation Sustainability Standards](#) (“Limited Scope Standards” or “LSS”) as an alternative to meeting OHFA’s requirements for sustainability.

For Competitive HTC projects selecting this option, the following are required in addition to the above:

- Certification by a HERS rater of the following:
  - The development meets or exceeds the higher of either the Overlay criteria or the current Ohio adopted standard; and
  - The post-construction blower door test demonstrates 150% improvement over the pre-rehabilitation test, up to 12 ACH.

## I. Minimum Rehabilitation Requirements

Any rehabilitation projects seeking HTC (competitive or non-competitive), must meet the definition of Substantial Rehabilitation as stated in the [Definitions](#) section of this document ~~and below~~.

~~**Substantial Rehabilitation:** Required repairs, replacements, and improvements that involve the replacement of two or more major building systems that have demonstrated need for replacement. The need to replace items must be documented in the PCNA and accepted by OHFA. An item’s EUL/RUL cannot be the sole factor in demonstrating need to repair or replace. Total replacement is not required, but the greater part (at least 50 percent) must be replaced and those constituent parts must have used at least 75% of its EUL or have only 25% RUL.~~

~~Major Building Systems (MBS) and their components/subcomponents are listed in Appendix C: OHFA EUL Table. At least 50% of each MBS’ components/subcomponents must need replacement before an MBS is eligible for replacement. Please note, however, that each component listed in the OHFA EUL Table is not necessarily equal in weight in terms of achieving at least 50% of the MBS. Applicants should contact the OHFA Architect if there are questions about a project’s eligibility.~~

~~**NOTE:** The MBS categories of Interiors and Accessibility do NOT count toward meeting the requirement for Substantial Rehabilitation. These MBS must be evaluated in the PCNA and included in the scope of work, but they do not count toward meeting the requirement for Substantial Rehabilitation.~~

OHFA will utilize the PCNA, ~~and~~ scope of work, ~~and~~ AHFA submitted by the applicant to verify the project meets the definition of Substantial Rehabilitation. Applicants must clearly identify the following in their application submission:

1. The components/~~subcomponents~~ needing replacement ~~and what MBS they fall under (Structural, Exterior Envelope, etc.);~~
2. The EUL/RUL of the identified components/subcomponents counting toward the substantial rehabilitation requirement; and
3. The page numbers of the PCNA that notes each identified components/subcomponents as needing replacement (this is separate from the EUL/RUL).

OHFA may require the applicant to adjust the scope of work if the proposed scope of work does not meet the definition and requirements for Substantial Rehabilitation.

## J. Site and Exterior Requirements

The below requirements apply to all projects. However, rehabilitation and adaptive reuse projects may request exceptions to the following:

- Durable Materials - Exterior
- Main Entry
- Sidewalks
- Outdoor Recreational Features

These requirements are specific to OHFA. They are in addition to all other applicable local and state codes, including those governing accessibility.

### 1. Durable Materials – Exterior

- 1.1. The elements in this section are required to be constructed with the following:
  - 1.1.1. Materials that have a 30-year Expected Useful Life (EUL) or longer, as defined by the OHFA EUL table found in [Appendix C](#);
  - 1.1.2. Materials that have a 30-year warranty that covers 75% or more of material replacement cost; or
  - 1.1.3. Any of the below pre-approved materials.
- 1.2. Materials that do not fall into any of the above categories must be approved by the OHFA architect.
- 1.3. Materials with a RUL of 50% or more or items in which the RUL of 50% equates to seven years or less, may be replaced with OHFA's approval through the Exception Request process.
- 1.4. If a conflict between any of the required durable materials and a green certification requirement exists, the highest durability standard that is compatible with certification ~~shall~~must prevail.
- 1.5. Pre-Approved Materials
  - 1.5.1. Exterior Walls
    - 1.5.1.1. Wood stud
    - 1.5.1.2. Brick or block
    - 1.5.1.3. Manufactured stone
    - 1.5.1.4. Metal stud framing
  - 1.5.2. Exterior Veneers
    - 1.5.2.1. Vinyl siding 0.042-0.055

- 1.5.2.2. Portland cement stucco (EIFS prohibited)
- 1.5.2.3. Fiber cement board
- 1.5.2.4. Brick
- 1.5.2.5. Thin stone
- 1.5.2.6. Thin brick (Thin brick must be mud set and may not have a metal grid system. Thin brick systems must have 40 year+ warranty that matches OHFA EUL for brick veneer.)
- 1.5.2.7. Laminated metal panels
- 1.5.3. Roofing
  - 1.5.3.1. Preformed metal
  - 1.5.3.2. 30-year asphalt shingles
  - 1.5.3.3. 20-year membrane roof (EPDM, PVC, TPO)
- 1.5.4. Insulation
  - 1.5.4.1. Must meet ASHRAE 90.1-2012 (or current Ohio adopted standard)
- 1.5.5. Windows & Exterior Doors
  - 1.5.5.1. New and replacement windows and exterior doors must be Energy Star rated for zone 5 and wind rated for 90mph or DP-20 minimum
  - 1.5.5.2. Exterior doors ~~shall~~must be insulated core

## 2. Community Integration

- 2.1. Developments should coordinate with or complement the local architecture and promote resident integration with the broader neighborhood. They should be culturally appropriate for the population being served and the community in which they are situated. Design should promote community safety to the greatest extent practicable.
- 2.2. Street networks and sidewalks that are internal to the development site should connect to municipal or surrounding streets and sidewalks wherever feasible.

## 3. Gutters and Downspouts

- 3.1. All downspouts ~~shall~~must empty onto concrete splash blocks with a positive slope away from the building or be piped to an appropriate location, unless an alternative design is dictated by the local code.

## 4. Main Entry

- 4.1. All main entries ~~shall~~must have a roof or awning over the entry area.

## 5. Parking

- 5.1. Where parking is provided, areas must be paved and graded for proper drainage as set forth in the HUD Minimum Property Standards.

## 6. Sidewalks

- 6.1. All sidewalks along the accessible route must be a minimum of 5-feet in width.

## 7. Dumpsters

- 7.1. Refuse collection stations must be screened with permanent enclosures.
- 7.2. Paved areas adjacent to the collection stations must be designed to provide adequate bearing for heavy garbage trucks.

## 8. Outdoor Recreational Features

- 8.1. All developments are encouraged to contain or be located in close proximity to play space, walking paths, or other recreational features and amenities appropriate to the population being served.
- 8.2. If provided, play areas for younger children ~~shall~~must not be in isolated areas and ~~shall~~must be located to maximize safety.

8.3. For single family dwellings, yard space must be maximized for outdoor activities/play areas. Sidewalks or other walkways must be located at the edge of the yard space to the extent feasible.

## **9. Retention/Detention Ponds**

8-3-9.1. Retentions/detention ponds must be clearly marked with “No Trespassing” signs; forbidding trespassing, swimming, skating, fishing, or boating.

## **K. Interior Requirements**

The below requirements apply to all projects. However, rehabilitation and adaptive reuse projects may request exceptions to the following:

- Durable Materials - Interior
- Major Building Components
- Common Areas
- Elevators
- Interior Doors
- Floor Coverings
- Unit Sizes
- Bedroom Sizes
- Bathrooms
- Kitchen & Appliances
- Laundry Facilities

These requirements are specific to OHFA. They are in addition to all other applicable local and state codes, including those governing accessibility.

### **1. Durable Materials – Interior**

- 1.1. The elements in this section are required to be constructed with the following:
  - 1.1.1. Materials that have a 30-year Expected Useful Life (EUL) or longer, as defined by the OHFA EUL table found in [Appendix C](#);
  - 1.1.2. Materials that have a 30-year warranty that covers 75% or more of material replacement cost; or
  - 1.1.3. Any of the below pre-approved materials.
- 1.2. Materials that do not fall into any of the above categories must be approved by the OHFA architect.
- 1.3. Materials with a RUL of 50% or more or items in which the RUL of 50% equates to seven years or less, may be replaced with OHFA’s approval through the Exception Request process.
- 1.4. If a conflict between any of the required durable materials and a green certification requirement exists, the highest durability standard that is compatible with certification ~~shall~~ must prevail.
- 1.5. Pre-Approved Materials
  - 1.5.1. Countertops
    - 1.5.1.1. Plastic laminate on moisture resistant, high-density fiberboard substrates
  - 1.5.2. Cabinets and Drawers
    - 1.5.2.1. Cabinet materials ~~shall~~ must be in accordance with the requirements of ANSI A161.1 "Minimum Construction Performance Standards for Kitchen Cabinets" and must also include:
      - 1.5.2.1.1. Solid wood doors/fronts
      - 1.5.2.1.2. Wood stile with plywood panel
      - 1.5.2.1.3. Plywood frame
  - 1.5.3. Residential Living Unit Floors
    - 1.5.3.1. Ceramic tile



- 1.5.3.2. Wood
- 1.5.3.3. Vinyl plank or tile
- 1.5.3.4. Sheet vinyl
- 1.5.3.5. Stained concrete
- 1.5.3.6. Carpet, only if solution-dyed nylon with closed-cell and antimicrobial and water resistant backing. If a pad is required, a high-density pad ~~shall~~must be used.
- 1.5.4. Drywall
  - 1.5.4.1. Moisture-resistant gypsum board (“paperless board”) or equivalent must be used on all vertical and horizontal surfaces that are within four feet of any water sources where the drywall can be splashed, such as kitchen sink, next to water heater, and/or clothes washer.
  - 1.5.4.2. Water-resistant gypsum, when used on ceilings must be rated for the span.

## 2. Major Building System Subcomponents

- 2.1. Water Heaters
  - 2.1.1. Must meet ASHRAE 90.1-2012 or current Ohio adopted standard.
- 2.2. HVAC systems
  - 2.2.1. Must be Energy Star-rated and/or meet the specific energy efficiency requirements of the applicable green building certification.
  - 2.2.2. Must meet ASHRAE 90.1-2012 or current Ohio adopted standard.
  - 2.2.3. Package Terminal Air Conditioning (PTAC) units are permitted only in rehabilitation projects in which they currently exist. Sleeves must be replaced with composite nonconductive energy efficient type. PTAC ducts may not block controls or windows.
  - 2.2.4. All affordable units must be air conditioned.
  - 2.2.5. Stacked mechanical units, if used, must allow for the access, service, and replacement of one unit without the removal of another (for example, a furnace must be able to be repaired without the removal of an adjacent water heater).
- 2.3. Electrical components
  - 2.3.1. All light bulbs ~~shall~~must have a 10,000-hour minimum life.
  - 2.3.2. Residential fixtures shall use common lamp base type fixtures such as A-19 or tube bi-pin. Bases such as GU24 and similar specialty bases are prohibited in residential areas and discouraged in multitenant buildings as well. LED lights are encouraged and required in all unheated areas.
  - 2.3.3. Obsolete electrical panels must be replaced. This includes electrical panels that contain components that are not readily and commonly available at a reasonable cost. The PCNA must document panel size, make and manufacturer. Replacement panels must show load calculations with major load change such as HVAC.
  - 2.3.4. In developments serving a family population, electrical outlets must be tamper resistant.

## 3. Common Areas

- 3.1. Community facilities such as offices, dining, mail pick-up, and other necessary functions ~~shall~~must be situated where they can be easily found by the residents. Most of these facilities shall be centrally located in close proximity of the primary entrance.
- 3.2. The maximum common area, using the Common Space definition for what constitutes common area, ~~shall~~must not exceed 20 percent of the total gross building square footage.
  - 3.2.1. This requirement *does not apply* to single-family homes, 1, 2, or 3-family dwellings, and townhomes, if the common area space is exclusively for use of the individual resident.
  - 3.2.2. This requirement *does not apply* to existing rental units, unless the footprint of the original building is expanded.
  - 3.2.3. Developments serving seniors or a PSH population may submit an exception request to exceed 20 percent.
- 3.3. Hallways must be a minimum of 42” in width (new construction only).

## 4. Elevators

- 4.1. All developments that exceed three stories must have an elevator accessible to all residents.
- 4.2. Developments serving seniors or a PSH population **shall** must not exceed one story unless the building has an elevator accessible to all residents.
  - 4.2.1. This requirement *does not apply* to single family homes, 1, 2, or 3-family dwellings, or townhouses.

## 5. Interior Doors

- 5.1. In projects involving new construction, interior doors **shall** must meet the following requirements:
  - 5.1.1. Minimum 32" in width
  - 5.1.2. Solid wood or solid core (ex: particle board core, foam core)
  - 5.1.3. Lever-style handles
- 5.2. In projects involving rehabilitation or adaptive reuse, interior doors **shall** must meet the following requirements:
  - 5.2.1. Existing doors, if replaced, **shall** must be replaced with solid wood or solid core doors (ex: particle board core, foam core).
- 5.3. These requirements *do not apply* to closet or pantry doors.

## 6. Floor Coverings

- 6.1. Floor coverings **shall** must be non-glare and slip resistant.
- 6.2. Carpet is **only** permitted in the following development types and locations:
  - 6.2.1. Management and social service office areas;
  - 6.2.2. Bedrooms in residential living units (except for Service Enriched housing developments);
  - 6.2.3. In senior developments, carpet is permitted in living/dining rooms only if a walk-off area is provided in front of any exterior/entry door.

## 7. Storage Space

- 7.1. All affordable units **shall** must include adequate storage space for unit residents. OHFA recognizes that adequacy will vary by population served and construction type.
- 7.2. Storage space in accessible units must be equivalent to storage space in non-accessible units.

## 8. Unit Sizes

- 8.1. All affordable units **shall** must meet the following minimum size requirements:
  - 8.1.1. 0-bedroom/Efficiency units (i.e. studio, efficiency): 450 square feet
    - 8.1.1.1. New Construction: 450 square feet
    - 8.1.1.2. Rehabilitation: 450 square feet
    - 8.1.1.3. Assisted Living: 350 square feet
  - 8.1.2. 1-bedroom units:
    - 8.1.2.1. New Construction: 550 square feet
    - 8.1.2.2. Rehabilitation: 500 square feet
    - 8.1.2.3. Service Enriched: 450 square feet
    - 8.1.2.4. Assisted Living: 450 square feet, or all HTC 1-bedroom units combined must average 500 square feet
  - 8.1.3. 2-bedroom units:
    - 8.1.3.1. New Construction: 750 square feet
    - 8.1.3.2. Rehabilitation: 700 square feet
  - 8.1.4. 3-bedroom units: 950 square feet
  - 8.1.5. 4+ bedroom units: 1,100 square feet
- 8.2. Single-room occupancy units (SROs) are not permitted.
- 8.3. Senior Developments may not have any unit larger than two bedrooms.
- 8.4. Single-family homes must contain three or more bedrooms.
- 8.5. OHFA reserves the right to limit the size of units during the application review process.

## 9. Bedroom Sizes

- 9.1. All affordable unit bedrooms ~~shall~~**must** meet the following minimum size requirements:
  - 9.1.1. ~~First~~**Primary** bedroom: 120 square feet
  - 9.1.2. ~~Second~~**ary** bedrooms: 100 square feet
  - ~~9.1.3. Third+ bedroom: 100 square feet~~
- 9.2. OHFA encourages bedrooms on accessible floors wherever practical.
- 9.3. At a minimum, three- and four-bedroom affordable units ~~shall~~**must** support double occupancy in each bedroom under local zoning and building requirements.

## 10. Bathrooms

- 10.1. For new construction only, affordable units must provide the following number of bathrooms based on unit size:
  - 10.1.1. 0-bedroom units: 1 full bathroom
  - 10.1.2. 1-bedroom units: 1 full bathroom
  - 10.1.3. 2-bedroom units: Either 1 full bathroom or ~~1.5 bathrooms~~**more**
  - 10.1.4. 3-bedroom units: Either 1.5 bathrooms or ~~2 full bathrooms~~**more**
  - 10.1.5. 4+ bedroom units: 2 full bathrooms **or more**
- 10.2. All plumbing fixtures must have lever-style handles.
- 10.3. Any wall-hung sinks must have concealed floor and stud-braced carriers.
- 10.4. New construction multi-story townhomes must have an accessible bathroom or accessible half-bathroom on the accessible floor.
- 10.5. At least 50% of the 504 mobility units provided must have one roll-in shower.
- 10.6. Sink cabinets may be removable in accessible units. If removable cabinets are used, the flooring and walls underneath the cabinet must be finished.

## 11. Kitchen & Appliances

- 11.1. All affordable unit kitchens ~~shall~~**must** include:
  - 11.1.1. Either a stand-alone range that is at least 30-inches wide or a cooktop and wall oven;
  - 11.1.2. An Energy Star-certified refrigerator (under-counter refrigerators will not be accepted);
  - 11.1.3. An Energy-Star certified dishwasher (if provided); and
  - 11.1.4. Plumbing fixtures with lever-style handles.
- 11.2. All kitchen appliances that are replaced or installed ~~shall~~**must** be new.
- 11.3. Kitchens in accessible units must have at least a 12" x 15" appliance-free counter-space adjacent to all appliances.
- 11.4. Sink cabinets may be removable in accessible units. If removable cabinets are used, the flooring and walls underneath the cabinet must be finished.
- 11.5. Kitchens in accessible units must have a work surface that does not exceed 34" in height, including the stove/cooktop.
- 11.6. Assisted Living units must be hard wired for a stove and located such that adding it does not require modification to the countertop or cabinet layout. A hood must be provided. Stove must be installed and made available at owner expense if requested by the resident and if doing so would not pose a health or safety risk to the requesting resident.

## 12. Laundry Facilities

- 12.1. All affordable units must include washer and dryer hookup unless laundry facilities are provided on-site.
  - 12.1.1. This requirement *does not apply* to Service Enriched, Assisted Living, or 0-bedroom units.
- 12.2. All clothes washers and clothes dryers provided by the property owner ~~shall~~**must** be Energy Star certified, excluding common area laundry facilities.

# L. Architectural Submission and Review Process

## Submissions and Correspondence

All communications related to the architectural review, including submission of architectural plans, must be sent to [arch@ohiohome.org](mailto:arch@ohiohome.org). State the project name as it appears in the AHFA/GFA and OHFA tracking number in the subject line, and carbon copy the project's development analyst on the email. If documents are too large to be sent via email, they must be submitted on a compact disc. **OHFA is not able to accept submissions through any of the following: external file transfer protocol (FTP) sites, Dropbox, Box, Google Drive, or OneDrive.**

All drawings and specifications must be prepared under direct supervision of an Ohio Licensed (active and current) Architect in accordance with the Architectural Practice Act, bear the license number of the architect, and if the architect is part of any business structure other than a sole proprietorship, he or she must include the Project Design Firm registration number on the drawings. The drawings are required to be signed and sealed by the design architect ("Architect of Record").

## Review Process

It is ~~highly~~ recommended that OHFA staff be involved in the design concept at the earliest stage possible to provide guidance through the review process.

Applicants must receive design approval from OHFA before proceeding with any element of construction or rehabilitation. OHFA will review plans for conformity to the requirements contained herein which include but are not limited to appropriateness for occupancy served, functionality, life safety, durability, quality of life, and scope of work. The development ~~shall~~**must** not change, convert, modify, reconfigure, or otherwise alter the number of bedrooms and the size of those bedrooms without prior written approval from OHFA.

OHFA may complete a joint architectural review with any other governmental entity involved in the project, including but not limited to USDA, HUD, SHPO, and local governments.

Decisions made by the OHFA Staff Architect may be appealed to the ~~Operations-Tax Credit~~ Manager in writing. Appeals must be specific and, where appropriate, cite to the governing regulation that conflicts with the Staff Architect decision.

## Required Documents - Preliminary Architectural Submission

At minimum, the proposal application architectural submission must include all of the following:

- The [Design and Construction Features Form](#) (DCFF), including Construction Certification, completed, signed and submitted as a pdf.
- Exception Request form(s), if applicable.
- Preliminary drawings, which ~~shall~~**must** include all of the following:
  - Cover sheet with name of development, development address, development team, drawing index, code information, and table indicating unit schedule (including accessible, adaptable and sensory impaired units), types and sizes;
  - Site plan, including parking data and layouts;
  - Landscape plan;
  - Dimensioned floor plans with room designations and proposed finishes;
  - Exterior elevations with material notations;
  - Typical wall sections (new construction only); and
  - Schematic Drawings and/or specifications for HVAC, plumbing, and electrical or similar items included in the scope of work.

Preliminary drawings, described above, **shall** be submitted in all of the following formats:

- Electronic format (pdf)
  - Single PDF file for all drawings specified above.
  - Separate PDF for specifications.
- Hard copy
  - Full set of architectural plans, 11"x17" scaled to fit. **Full-size architectural plans will be rejected.**

Upon request only, preliminary drawings **shall** be submitted in DXF R-14 format or DWG AutoCAD R-14 format.

## Required Documents - Final Architectural Submission

Final applications must include 80 percent complete permit sets, including final plans for all trades. Unless approved by OHFA, the plans must include the project name as submitted with the proposal application and OHFA tracking number. The submission must show conformity to the preliminary submittal, including the information included within the Design and Construction Features Form.

At minimum, the final application architectural submission must include all of the following:

- The DCFF included/incorporated into the front of the 80% plan sets. The DCFF must include:
  - Updated information, if needed, from the proposal application submission, matching the information in the 80% plans;
  - The signed Construction Certification pages;
  - Completed verifications, as applicable, that the drawings comply with any and all accessibility, energy efficiency, universal design, and/or green building requirements required for the development or committed to in the application for funding.
- Asbestos, mold, lead-based paint considerations as required.
- Items required to be completed per Phase I or II Environmental Site Assessment, or per applicable Environmental Review performed by OHFA.
- Plan sets, which **shall** include all of the following:
  - Site plans
  - Interior and Exterior elevations
  - Dimensioned floor plans
  - Wall sections (if applicable)
  - Structure (if applicable)
  - Finishes
  - Details
  - Mechanical plans
    - Drawings must have a dimensioned plumbing plan and control points located for rough-in site verification. All pipes-through-floor and the walls they are intended to be located within must be dimensioned relative to the foundation where they must align with walls and/or islands above.
    - OHFA strongly encourages a surveyor to locate wall and through-slab pipe penetrations. Foundation over dig must be filled with insulation or forms and then back filled.

Plan sets, described above, **shall** be submitted in all of the following formats:

- Electronic format (pdf)
  - Separate, single PDF files for drawings including all site plans, dimensioned floor plans, elevations, wall sections, structure, finishes, details and mechanical plans.

- Separate PDF file for specifications.
- Electronic format (AutoCAD)
  - Dimensioned floor plans only, submitted in DXF or DWG AutoCAD R-14 format.
    - It is preferred that the project architect's polyline area lines be included.
    - If drawings are externally referenced (xref), submissions must be bound (xbind) prior to creating files for OHFA.
    - Proprietary authorship information such as title blocks, Architecture seals, etc. should be removed.
    - DXF should be generated from the base file and not a plan sheet file.
- Hard copy
  - Full set of architectural plans, 11"x17" scaled to fit. **Full-size architectural plans will be rejected.**

## M. Monitoring & Compliance

### Construction Monitoring

The OHFA Project Administration team ensures that construction progresses according to schedule and that the recipient fulfills all terms of the funding agreements and related policies. Staff will conduct periodic site visits during construction to provide technical assistance, verify that the project is on schedule to meet required deadlines, and to ensure requirements of the various funding sources are being met.

For projects utilizing HDAP funds, staff will also review construction costs, progress, third-party inspection reports and change orders as part of each request for funds. OHFA may request copies of change orders if additional information is needed to verify project costs or to verify that commitments made by the recipient during the application process will still be met.

The development ~~shall~~**must** notify OHFA of any substantial changes in plans, scope, or materials that are contemplated after submitting 80 percent plans and throughout construction of the project. This includes any damages, fires, or environmental issues that adversely impact the project, project completion or occupancy. Notifications ~~shall~~**must** be made through the existing [Quarterly Construction Monitoring report form](#), which will be updated to include an option for Notification of Construction Changes. OHFA staff will provide a response within two weeks.

### Notification of Construction Start

Projects ~~shall~~**must** notify OHFA when construction begins and should invite an OHFA ~~representative~~**Project Administration Staff** to any pre-construction meetings, if held. Regular communication with the Project Administration team ensures that projects meet all the necessary requirements and are completed on time.

### Quarterly Construction Monitoring Reports

All developments utilizing HTC or HDAP funds are required to complete the [OHFA Quarterly Construction Monitoring Report](#) (the Report), available on the OHFA [Project Administration](#) webpage. The Report must be submitted quarterly beginning the first quarterly reporting period following either OHFA Board approval or actual construction start, whichever is earlier. Reports are due January 1, April 1, July 1, and October 1 of each year until the project is placed into service. OHFA reserves the right to suspend disbursement of funds if the Report is not submitted.

### Additional Documentation required for HOME and NHTF

Starting with 2021 awards, all HOME and NHTF awards must complete documentation to comply with Section 3 requirements. Documentation at minimum includes identifying the total hours, Section 3 hours, and Section 3 targeted hours for all contractor employees working on the project on the Monthly Section 3

Utilization Report, identification of if the contractor has Section 3 business concern status, and to the greatest extent feasible meet or exceed the following benchmark goals.

1. Section 3 workers are 25% or more of the total number of labor hours worked by all workers on a Section 3 project.
2. Targeted Section 3 workers are 5% or more of the total number of labor hours worked by all workers on a Section 3 project

Please note that contractors also have to submit Section 3 Worker Status Certification forms (for each worker) and a Contractor Workforce Section 3 Certification form to OHFA with the first Monthly Section 3 Utilization Report. Review Policy 21-04 for details on compliance including when the benchmarks aren't met to complete "Qualitative efforts".

For additional details on all Section 3 requirements review the Ohio Department of Development resource page. All Section 3 submissions to OHFA can be attached to the OHFA Quarterly Construction Monitoring Form. Contact your Project Administration Analyst with any questions.

## Construction Completion

OHFA Project Administration staff will conduct a construction closeout visit once construction is substantially complete to verify all required and committed components have been constructed and that the development meets life safety requirements.

In addition, the following documents are required to be submitted to OHFA with the request for HDAP project closeout and/or issuance of Form 8609:

- Certificate(s) of Occupancy (or Final Inspection from the governing jurisdiction, if applicable);
- AIA G704 Certificate of Substantial Completion;
- Evidence of final certification from Energy Star, Enterprise Green Communities, LEED, or NGBS;
- Verification that architectural/design requirements that were committed to as part of the Competitive HTC process, such as Exceptional Development criteria, exercise and wellness features, aging in place components, or universal design components, have been completed; and
- Verification that any unresolved site-specific mitigations as specified in the project's environmental review clearance letter from OHFA have been completed (HDAP and 811 only).

Project closeout and issuance of Form 8609 will not occur until the above have been submitted and reviewed by OHFA and any remaining issues have been resolved.

# APPENDIX A: EXCEPTION REQUESTS

## New Construction

All items in the [Site and Exterior Requirements](#) and [Interior Requirements](#) sections are **required** for developments involving new construction. Requests for exceptions may only be submitted for the following:

- Items that are subject to non-OHFA (such as local codes or design standards, funding source, etc.) requirements that may conflict with these Standards; or
- Items that are unable to be complied with for a compelling reason, as fully described by the applicant in the Exception Request form.

Exception requests will be reviewed on a case-by-case basis and must include supporting documentation to justify the request. As noted in the [Exceptions](#) section, The OHFA staff architect will review requests and make a recommendation to the management team to accept, deny, or modify the exception. A final determination will be made by OHFA by the date indicated in the program calendars.

## Rehabilitation and Adaptive Reuse

Projects involving rehabilitation or adaptive reuse may seek an exception to certain requirements in the [Site and Exterior Requirements](#) and [Interior Requirements](#) sections as noted below if able to evidence that incorporating a specific element is infeasible. The exception request must include adequate supporting documentation to demonstrate how incorporation of the element is infeasible.

- Durable Materials - Exterior
- Main Entry
- Sidewalks
- Outdoor Recreational Features
- Durable Materials - Interior
- Major Building Components
- Common Areas
- Elevators
- Interior Doors
- Floor Coverings
- Unit Sizes
- Bedroom Sizes
- Bathrooms
- Kitchen & Appliances
- Laundry Facilities

Rehabilitation and adaptive reuse projects may also request exceptions to the following:

- Universal Design mandatory components (if seeking competitive points through the Competitive HTC program)
- Items with 75% or more RUL (if replacement required for green certification)
- Accessibility requirements (if compliance is technically infeasible)

## Historic Preservation

If a project's development budget includes federal and/or state historic tax credits, the applicant is not required to submit an Exception Request form for approval in advance of the proposal application.

The Exception Request form must still be completed only to identify those areas in which the project cannot meet OHFA's requirements. The form ~~shall~~**must** be submitted with the proposal application, physically attached to the preliminary plans. OHFA will work with the State Historic Preservation Office (SHPO) to ensure those OHFA requirements that can be met, will be met.

## Submission Requirements

Applicants will be required to submit the request using the OHFA Exception Request form found on the [OHFA website](#) and must provide supporting documentation as necessary to justify the request. All exception requests must include concise supporting documentation such as an applicable section of code, site plan, floor plan, etc. as is applicable.



## Deadlines

Applicants must reference the applicable program guidelines to determine when exception requests are due. All requests for design exceptions are due prior to the applicable application deadline, *with the exception of the following which may be submitted with the application:*

- Developments utilizing federal or state historic tax credits; or
- Developments applying for 4% tax credits only (non-BGF); or
- Existing multifamily rental rehabilitation developments seeking an exception to minimum unit size and/or minimum bedroom size requirements.

In the above cases, the Exception Request form for these items must still be completed but ~~shall~~must be submitted with the application instead of in advance, physically attached to the preliminary plans.

# APPENDIX B: UNIVERSAL DESIGN COMPONENTS

~~Competitive HTC only: Developments seeking points for Universal Design as outlined in the QAP All HTC developments must incorporate all mandatory components (marked with an asterisk) in all units, as well as the specified number of additional components required for points. Exception requests for mandatory components will be accepted for rehabilitation projects.~~

~~OHFA will accept proposed universal design features beyond the provided list relevant and necessary to the applicant's development. The applicant will be required to clearly describe the additional feature and provide justification for the necessity of its inclusion. The evaluation, acceptance, and classification of universal design proposals is the sole discretion of OHFA.~~

## Entry

- ✓ \*36"-wide (minimum) entry door with lever-style handle (mandatory for NC only)
- ✓ \*Minimum 5' x 5' level clear space inside and outside entry door
- ✓ \*Adequate non-glare lighting at walkways, accessible routes, and exterior spaces
- ✓ \*Adequate lighting both inside and outside the building and unit entrance
- ✓ \*High visibility address numbers (both building and exterior units)
- ✓ \*Overhead weather protection at entrances (mandatory for NC only)
- Built-in shelf/bench/ledge located outside the door
- Nonslip surfaces on walkways and entryways
- Primary unit entry with an accessible/dual peephole and backlit doorbell
- Door locks that are easy to operate, such as keyless locks with remote control or keypad
- No-step entry (1/2" or less threshold) at main entrance

## Interior Stairs and Hallways

- ✓ \*Adequate lighting to illuminate all stairway(s), landings, and hallway(s)
- ✓ \*Hallways with a minimum width of 42"
- ✓ \*Anti-slip strips on front edge of steps in color-contrast material
- Color contrast between stair treads and risers
- Handrails on both sides of interior stairs

## Interior Doors

- ✓ \*34"-wide (minimum) doors leading to habitable room, allowing for a 32" minimum clearance
- ✓ \*Lever-style door hardware on all interior doors
- ✓ \*Interior maximum door threshold of ¼ inch beveled or flush
- Pocket doors with easy-to-grip handles

## Faucets

- ✓ \*Anti-scald faucets with lever handle for all sinks, bathtubs, and showers
- ✓ \*Pressure balanced faucets

## Electrical

- ✓ \*Thermostat and control panels that are easy to read and simple to operate
- ✓ \*Rocker, touch light, or hands-free switches
- ✓ \*Extra electrical outlets (for medical equipment or rechargeable items, etc.) placed 18" to 24" above finished floor (bedroom only)
- Lighted switches visible in the dark

- Switched outlets for lamps, etc. to be turned on with wall switch
- Electrical outlets, phone jacks, and data ports at least 18" above finished floor
- Light switches between 44"-48" above finished floor; thermostats no more than 48" above finished floor
- Clear access space of 30" by 48" in front of switches, outlets, and controls
- Audible and visual alarms for smoke/fire/carbon monoxide in all code-required accessible areas and all units

## Bathrooms

- ✓ \*Countertops with beveled/radiused corners. Outside corners are suggested to be a two-inch corner radius, waterfall edge with one-inch radius, or two-inch chamfer.
- ✓ \*Adjustable-height showerhead or hand-held showerhead with flexible hose and easily operable controls
- ✓ \*Non-glare lighting at vanities
- A full- or half-bath on the main floor with clear floor space of 30" x 48"
- Overhead light fixture in tub/shower
- Mirror(s) placed for both standing and sitting, such as a full-length or tilting mirror
- Toilet centered at least 18" from any side wall, tub, or cabinet
- In at least one bathroom per unit:
  - Low-threshold or curbless shower at least 5' x 3' OR ADA bathtub with seat
  - Clear knee space (at least 27" high) under sink. May be open knee space or achieved by means of removable vanity or fold-back or self-storing doors. Pipe protection panels must be provided to prevent contact with hot or sharp surfaces.
  - Grab bars, or wall-blocking for future installation of grab bars, in tub/shower, and toilet. Grab bars must be properly anchored and supported.

## Kitchen

- ✓ \*At least 15" clear space/"landing zone" on each side of stove and sink, and at least one side of refrigerator. This is countertop clear space and may be shared with another appliance and/or required work surface if applicable.
- ✓ \*Loop handles on drawers and cabinets
- ✓ \*Non-glare task lighting to illuminate sink, stove, and work areas
- Adjustable height shelves in wall cabinets
- Base cabinets with pull out drawers
- Pull-out work surface near the oven, refrigerator and/or microwave.
- Visual contrast at front edge of countertop or between the countertop and the cabinets
- Side-by-side refrigerator-freezer
- Cooktop/range with front or side-mounted controls (senior units only)
- Extra outlets for small appliances, electronics, etc.
- Clear knee space (at least 27" high) under sink, counters, and/or cook tops. If under sink, pipes must have protection and may not be in the required knee space. May be open knee space or achieved by means of removable base cabinets or fold-back or self-storing doors.

## Closets/Storage

- Area is well-lit with a switch located outside the space
- Doors and handles that are easy to operate. No bi-fold or accordion-type doors.
- Adjustable-height shelving and/or closet rods OR clothes rods installed at multiple heights
- Pull out-shelves, rollout cabinets, and other easy to access storage components



## APPENDIX C: OHFA EUL TABLE

<u>System Description</u>	<u>Overall General Description</u>	<u>Comp.</u>	<u>Sub-Comp.</u>	<u>Component Description</u>	<u>Family</u>	<u>Senior</u>
<u>3.1</u>	-	-	-	<u>Overall General Description</u>	-	-
<u>3.2</u>	-	-	-	<u>SYSTEM: SITE</u>	-	-
-	<u>3.2.1</u>	-	-	<u>Topography</u>	-	-
-	<u>3.2.2</u>	-	-	<u>Storm Water Drainage</u>	-	-
-	-	<u>3.2.2.1</u>	-	<u>Catch basins, inlets, culverts</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.2.2</u>	-	<u>Marine or stormwater bulkhead</u>	<u>35</u>	<u>35</u>
-	-	<u>3.2.2.3</u>	-	<u>Earthwork, swales, drainways, erosion controls</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.2.4</u>	-	<u>Storm drain lines</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.2.5</u>	-	<u>Stormwater mgmt ponds</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.2.6</u>	-	<u>Fountains, pond aerators</u>	<u>15</u>	<u>15</u>
-	<u>3.2.3</u>	-	-	<u>Access and Egress</u>	-	-
-	-	<u>3.2.3.1</u>	-	<u>Security gate - lift arm</u>	<u>10</u>	<u>10</u>
-	-	<u>3.2.3.2</u>	-	<u>Security gate - rolling gate</u>	<u>15</u>	<u>15</u>
-	<u>3.2.4</u>	-	-	<u>Paving, Curbing and Parking</u>	-	-
-	-	<u>3.2.4.1</u>	-	<u>Asphalt Pavement</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.4.2</u>	-	<u>Asphalt Seal Coat</u>	<u>5</u>	<u>5</u>
-	-	<u>3.2.4.3</u>	-	<u>Concrete Pavement</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.4.4</u>	-	<u>Curbing, Asphalt</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.4.5</u>	-	<u>Curbing, Concrete</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.4.6</u>	-	<u>Parking, Gravel Surfaced</u>	<u>15</u>	<u>15</u>
-	-	<u>3.2.4.7</u>	-	<u>Permeable Paving Systems (brick, concrete pavers)</u>	<u>30</u>	<u>30</u>
-	-	<u>3.2.4.8</u>	-	<u>Striping and Marking</u>	<u>15</u>	<u>15</u>
-	-	<u>3.2.4.9</u>	-	<u>Signage, Roadway / Parking</u>	<u>15</u>	<u>15</u>
-	-	<u>3.2.4.10</u>	-	<u>Carports, wood frame</u>	<u>30</u>	<u>30</u>
-	-	<u>3.2.4.11</u>	-	<u>Carports, metal frame</u>	<u>40</u>	<u>40</u>
-	<u>3.2.5</u>	-	-	<u>Flatwork (walks, plazas, terraces, patios)</u>	-	-
-	-	<u>3.2.5.1</u>	-	<u>Asphalt</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.5.2</u>	-	<u>Concrete</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.5.3</u>	-	<u>Gravel</u>	<u>15</u>	<u>15</u>
-	-	<u>3.2.5.4</u>	-	<u>Permeable Paving (brick, concrete pavers)</u>	<u>30</u>	<u>30</u>
-	<u>3.2.6</u>	-	-	<u>Landscaping and Appurtenances</u>	-	-
-	-	<u>3.2.6.1</u>	-	<u>Fencing, chain-link</u>	<u>40</u>	<u>40</u>
-	-	<u>3.2.6.2</u>	-	<u>Fencing, wood picket</u>	<u>15</u>	<u>20</u>
-	-	<u>3.2.6.3</u>	-	<u>Fencing, wood board (=&gt;1"x 6")</u>	<u>20</u>	<u>25</u>
-	-	<u>3.2.6.4</u>	-	<u>Fencing, wrought Iron</u>	<u>60</u>	<u>60</u>
-	-	<u>3.2.6.5</u>	-	<u>Fencing, steel or aluminum</u>	<u>20</u>	<u>25</u>
-	-	<u>3.2.6.6</u>	-	<u>Fencing, concrete Masonry unit (CMU)</u>	<u>30</u>	<u>30</u>
-	-	<u>3.2.6.7</u>	-	<u>Fencing, PVC</u>	<u>15</u>	<u>20</u>

-	-	<u>3.2.6.8</u>	-	<u>Signage, Entrance/Monument</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.6.9</u>	-	<u>Mail Kiosk</u>	<u>15</u>	<u>20</u>
-	-	<u>3.2.6.10</u>	-	<u>Retaining Walls, heavy block (50-80 lb)</u>	<u>60</u>	<u>60</u>
-	-	<u>3.2.6.11</u>	-	<u>Retaining Walls, re-inforced concrete masonry unit (CMU)</u>	<u>40</u>	<u>40</u>
-	-	<u>3.2.6.12</u>	-	<u>Retaining Walls, treated timber</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.6.13</u>	-	<u>Storage sheds</u>	<u>30</u>	<u>30</u>
-	<b><u>3.2.7</u></b>	-	-	<b><u>Recreational Facilities</u></b>	-	-
-	-	<u>3.2.7.1</u>	-	<u>Sport Court- asphalt</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.7.2</u>	-	<u>Sport Court- synthetic</u>	<u>15</u>	<u>20</u>
-	-	<u>3.2.7.3</u>	-	<u>Sport Court-hardwood</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.7.4</u>	-	<u>Tot Lot (playground equipment)</u>	<u>10</u>	<u>15</u>
-	-	<u>3.2.7.5</u>	-	<u>Tot Lot- loose ground cover</u>	<u>3</u>	<u>5</u>
-	-	<u>3.2.7.6</u>	-	<u>Pool Deck</u>	<u>15</u>	<u>15</u>
-	-	<u>3.2.7.7</u>	-	<u>Pool/Spa Plastic Liner</u>	<u>8</u>	<u>8</u>
-	-	<u>3.2.7.8</u>	-	<u>Pool/Spa pumps and equipment</u>	<u>10</u>	<u>10</u>
-	-	<u>3.2.7.9</u>	-	<u>Decks-treated lumber</u>	<u>20</u>	<u>20</u>
-	-	<u>3.2.7.10</u>	-	<u>Decks-composite</u>	<u>50</u>	<u>50</u>
-	<b><u>3.2.8</u></b>	-	-	<b><u>Site Utilities</u></b>	-	-
-	-	<u>3.2.8.1</u>	-	<b><u>Site Utilities-Water</u></b>	-	-
-	-	-	<u>3.2.8.1.1</u>	<u>Water Mains/Valves</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.2.8.1.2</u>	<u>Water Tower</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.2.8.1.3</u>	<u>Irrigation System</u>	<u>25</u>	<u>25</u>
-	-	<u>3.2.8.2</u>	-	<b><u>Site Utilities-Electric</u></b>	-	-
-	-	-	<u>3.2.8.2.1</u>	<u>Electric distribution center</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.2.8.2.2</u>	<u>Electric distribution lines</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.2.8.2.3</u>	<u>Transformer</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.2.8.2.4</u>	<u>Emergency Generator</u>	<u>25</u>	<u>25</u>
-	-	-	<u>3.2.8.2.5</u>	<u>Solar Photovoltaic panels</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.2.8.2.6</u>	<u>Photovoltaic Inverters</u>	<u>10</u>	<u>10</u>
-	-	-	<u>3.2.8.2.7</u>	<u>Pole mounted lights</u>	<u>25</u>	<u>25</u>
-	-	-	<u>3.2.8.2.8</u>	<u>Ground lighting</u>	<u>10</u>	<u>10</u>
-	-	-	<u>3.2.8.2.9</u>	<u>Building Mounted Lighting</u>	<u>10</u>	<u>10</u>
-	-	-	<u>3.2.8.2.10</u>	<u>Building Mounted High Intensity Discharge (HID) Lighting</u>	<u>10</u>	<u>20</u>
-	-	<u>3.2.8.3</u>	-	<b><u>Site Utilities-Gas</u></b>	-	-
-	-	-	<u>3.2.8.3.1</u>	<u>Gas Main</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.2.8.3.2</u>	<u>Gas Supply Lines</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.2.8.3.3</u>	<u>Site Propane, Storage &amp; Distribution</u>	<u>35</u>	<u>35</u>
-	-	-	<u>3.2.8.3.4</u>	<u>Gas lights/fire pits</u>	<u>20</u>	<u>20</u>
-	-	<u>3.2.8.4</u>	-	<b><u>Site Utilities-Sewer</u></b>	-	-
-	-	-	<u>3.2.8.4.1</u>	<u>Sanitary Sewer lines</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.2.8.4.2</u>	<u>Sanitary waste treatment system</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.2.8.4.3</u>	<u>Lift Station</u>	<u>50</u>	<u>50</u>
-	-	<u>3.2.8.5</u>	-	<b><u>Site Utilities-Trash</u></b>	-	-

-	-	-	<a href="#">3.2.8.5.1</a>	<a href="#">Dumpsters</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.2.8.5.2</a>	<a href="#">Compactors (exterior, commercial grade)</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.2.8.5.3</a>	<a href="#">Recycling containers/equipment</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.2.8.5.4</a>	<a href="#">Composting, organic recycling equipment</a>	<a href="#">10</a>	<a href="#">10</a>
<b>3.3</b>	-	-	-	<b>SYSTEM: BUILDING FRAME AND ENVELOPE</b>	-	-
-	<b>3.3.1</b>	-	-	<b>Foundation</b>	-	-
-	-	<a href="#">3.3.1.1</a>	-	<a href="#">Slab, reinforced concrete</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.1.2</a>	-	<a href="#">Slab, post tensioned</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.1.3</a>	-	<a href="#">Continuous reinforced concrete footer and CMU stem wall</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.1.4</a>	-	<a href="#">Piers, reinforced concrete footer and CMU pier</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.1.5</a>	-	<a href="#">Piers, treated timber post/pole</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	<a href="#">3.3.1.6</a>	-	<a href="#">Foundation Waterproofing</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	<a href="#">3.3.1.7</a>	-	<a href="#">Foundation suction, drainage, moisture or radon gas controls/alarms</a>	<a href="#">10</a>	<a href="#">10</a>
-	<b>3.3.2</b>	-	-	<b>Building Frame</b>	-	-
-	-	<a href="#">3.3.2.1</a>	-	<b>Framing System, Floors &amp; Walls</b>	-	-
-	-	-	<a href="#">3.3.2.1.1</a>	<a href="#">Wood, timbers, dimensioned lumber, laminated beams, trusses</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.3.2.1.2</a>	<a href="#">Tie downs, clips, braces, straps, hangers, shear walls/panels</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.3.2.1.3</a>	<a href="#">Steel, beams, trusses</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.3.2.1.4</a>	<a href="#">Reinforced concrete</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.3.2.1.5</a>	<a href="#">Reinforced masonry, concrete masonry units (CMUs)</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.3.2.1.6</a>	<a href="#">Solid Masonry (obsolete)</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.2.2</a>	-	<b>Crawl Spaces, Envelope Penetrations</b>	-	-
-	-	-	<a href="#">3.3.2.2.1</a>	<a href="#">Sealed crawl space system</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.3.2.2.2</a>	<a href="#">Vents, screens, covers</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.3.2.2.3</a>	<a href="#">Vapor Barrier (VDR) ground or underfloor</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.3.2.2.4</a>	<a href="#">Penetrations, caulking/sealing</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.3.2.2.5</a>	<a href="#">Crawl space, (de)pressurization, fans, pumps, radon gas alarms</a>	<a href="#">10</a>	<a href="#">10</a>
-	-	<a href="#">3.3.2.3</a>	-	<b>Roof Frame &amp; Sheathing</b>	-	-
-	-	-	<a href="#">3.3.2.3.1</a>	<a href="#">Wood frame and board or plywood sheathing</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.3.2.3.2</a>	<a href="#">Tie downs, clips, braces, straps, hangers</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.3.2.3.3</a>	<a href="#">Steel frame and sheet metal or insulated panel sheathing</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.3.2.3.4</a>	<a href="#">Reinforced concrete deck</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	<a href="#">3.3.2.4</a>	-	<b>Flashing &amp; Moisture Protection</b>	-	-
-	-	-	<a href="#">3.3.2.4.1</a>	<a href="#">Caulking and Sealing</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.3.2.4.2</a>	<a href="#">Concrete/Masonry Sealants</a>	<a href="#">10</a>	<a href="#">10</a>
-	-	-	<a href="#">3.3.2.4.3</a>	<a href="#">Wood waterproofing and sealants</a>	<a href="#">10</a>	<a href="#">10</a>
-	-	-	<a href="#">3.3.2.4.4</a>	<a href="#">Building wraps &amp; moisture resistant barriers</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.3.2.4.5</a>	<a href="#">Paints and stains, exterior</a>	<a href="#">8</a>	<a href="#">8</a>
-	-	<a href="#">3.3.2.5</a>	-	<b>Attics &amp; Eaves</b>	-	-
-	-	-	<a href="#">3.3.2.5.1</a>	<a href="#">Screened gable end or soffit Vents</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.3.2.5.2</a>	<a href="#">Roof vents, passive</a>	<a href="#">40</a>	<a href="#">40</a>

-	-	-	<u>3.3.2.5.3</u>	<u>Roof Vents, powered</u>	<u>20</u>	<u>20</u>
-	-	<u>3.2.2.6</u>	-	<b><u>Insulation</u></b>	-	-
-	-	-	<u>3.3.2.6.1</u>	<u>Loose fill, fibre glass, cellulose, mineral wool</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.6.2</u>	<u>Batts, blankets, rolls, fibre glass or mineral wool</u>	<u>60</u>	<u>60</u>
-	-	-	<u>3.3.2.6.3</u>	<u>Rigid foam board</u>	<u>60</u>	<u>60</u>
-	-	-	<u>3.3.2.6.4</u>	<u>Sprayed foam</u>	<u>60</u>	<u>60</u>
-	-	<u>3.3.2.7</u>	-	<b><u>Exterior Stairs, Rails, Balconies/Porches, Canopies</u></b>	-	-
-	-	-	<u>3.3.2.7.1</u>	<u>Exterior Stairs, wood frame/stringer</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.2.7.2</u>	<u>Exterior Stair Tread-wood</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.3.2.7.3</u>	<u>Exterior Stairs-steel frame/stringer</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.3.2.7.4</u>	<u>Exterior Stair Tread-metal, concrete filled</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.2.7.5</u>	<u>Exterior Stairs, Concrete</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.6</u>	<u>Fire escapes, metal</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.7</u>	<u>Balcony/Porch, wood frame</u>	<u>25</u>	<u>25</u>
-	-	-	<u>3.3.2.7.8</u>	<u>Balcony/Porch, steel frame or concrete</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.3.2.7.9</u>	<u>Balcony/Porch, wood decking</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.2.7.10</u>	<u>Balcony/Porch, composite decking</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.11</u>	<u>Railings, wood</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.2.7.12</u>	<u>Railings, metal</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.13</u>	<u>Railings, composite</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.14</u>	<u>Canopy, Concrete</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.7.15</u>	<u>Canopy, Wood/Metal</u>	<u>40</u>	<u>40</u>
-	-	<u>3.3.2.8</u>	-	<b><u>Exterior Doors &amp; Entry Systems</u></b>	-	-
-	-	-	<u>3.3.2.8.1</u>	<u>Unit Entry Door, Exterior, solid wood/metal clad</u>	<u>25</u>	<u>30</u>
-	-	-	<u>3.3.2.8.2</u>	<u>Common Exterior Door, aluminum and glass</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.2.8.3</u>	<u>Common Exterior Door, solid wood /metal clad</u>	<u>25</u>	<u>25</u>
-	-	-	<u>3.3.2.8.4</u>	<u>Storm/Screen Doors</u>	<u>5</u>	<u>10</u>
-	-	-	<u>3.3.2.8.5</u>	<u>Sliding Glass Doors</u>	<u>25</u>	<u>30</u>
-	-	-	<u>3.3.2.8.6</u>	<u>French or Atrium Doors, wood/metal clad</u>	<u>25</u>	<u>30</u>
-	-	-	<u>3.3.2.8.7</u>	<u>Automatic Entry Doors</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.2.8.8</u>	<u>Commercial Entry Systems</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.2.8.9</u>	<u>Overhead Door</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.2.8.10</u>	<u>Automatic Opener, overhead door</u>	<u>20</u>	<u>20</u>
-	<u>3.3.3</u>	-	-	<b><u>Façades or Curtainwall</u></b>	-	-
-	-	<u>3.3.3.1</u>	-	<b><u>Sidewall System</u></b>	-	-
-	-	-	<u>3.3.3.1.1</u>	<u>Aluminum Siding</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.3.3.1.2</u>	<u>Vinyl Siding</u>	<u>25</u>	<u>25</u>
-	-	-	<u>3.3.3.1.3</u>	<u>Cement Board Siding</u>	<u>45</u>	<u>45</u>
-	-	-	<u>3.3.3.1.4</u>	<u>Plywood/Laminated Panels</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.3.1.5</u>	<u>Exterior Insulation Finishing System (EIFS)</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.3.1.6</u>	<u>Stucco, over wire mesh/lath</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.3.1.7</u>	<u>Metal/Glass Curtain Wall</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.3.3.1.8</u>	<u>Precast Concrete Panel (tilt-up)</u>	<u>60</u>	<u>60</u>



-	-	-	<u>3.3.3.1.9</u>	<u>Brick/block veneer</u>	<u>60</u>	<u>60</u>
-	-	-	<u>3.3.3.1.10</u>	<u>Stone Veneer</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.3.1.11</u>	<u>Glass Block</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.3.1.12</u>	<u>Cedar/Redwood shakes, clapboard</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.3.1.13</u>	<u>Pine board, clapboard</u>	<u>50</u>	<u>50</u>
-	-	<u>3.3.3.2</u>	-	<b><u>Windows</u></b>	-	-
-	-	-	<u>3.3.3.2.1</u>	<u>Wood, (dbl, sgl hung, casement, awning, sliders)</u>	<u>35</u>	<u>45</u>
-	-	-	<u>3.3.3.2.2</u>	<u>Wood, fixed pane, picture</u>	<u>40</u>	<u>45</u>
-	-	-	<u>3.3.3.2.3</u>	<u>Aluminum</u>	<u>35</u>	<u>40</u>
-	-	-	<u>3.3.3.2.4</u>	<u>Vinyl</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.3.2.5</u>	<u>Vinyl/Alum Clad Wood</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.3.2.6</u>	<u>Storm/Screen Windows</u>	<u>7</u>	<u>15</u>
-	<u>3.3.4</u>	-	-	<b><u>Roofing and Roof Drainage</u></b>	-	-
-	-	<u>3.3.4.1</u>	-	<b><u>Sloped Roofs</u></b>	-	-
-	-	-	<u>3.3.4.1.1</u>	<u>Asphalt Shingle</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.4.1.2</u>	<u>Metal</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.4.1.3</u>	<u>Slate shingle</u>	<u>75</u>	<u>75</u>
-	-	-	<u>3.3.4.1.4</u>	<u>Clay/cementitious barrel tile</u>	<u>60</u>	<u>60</u>
-	-	-	<u>3.3.4.1.5</u>	<u>Wood Shingle, Cedar Shakes/Shingles</u>	<u>25</u>	<u>25</u>
-	-	<u>3.3.4.2</u>	-	<b><u>Low Slope/Flat Roofs</u></b>	-	-
-	-	-	<u>3.3.4.2.1</u>	<u>Low slope-Built-up Roof, with gravel finish</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.4.2.2</u>	<u>Low slope-Built-up Roof, no mineral or gravel finish</u>	<u>10</u>	<u>10</u>
-	-	-	<u>3.3.4.2.3</u>	<u>Low slope-Adhered rubber membrane, (EPDM)</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.3.4.2.4</u>	<u>Low slope-Thermoplastic membrane, (TPO, vinyl)</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.3.4.2.5</u>	<u>Low slope-Rubberized/elastomeric white/cool roof</u>	<u>15</u>	<u>15</u>
-	-	<u>3.3.4.3</u>	-	<b><u>Roof Drainage, Trim &amp; Accessories</u></b>	-	-
-	-	-	<u>3.3.4.3.1</u>	<u>Gutters/Downspouts, aluminum</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.4.3.2</u>	<u>Gutters/Downspouts, copper</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.3.4.3.3</u>	<u>Low slope-roof drains, scuppers</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.4.3.4</u>	<u>Soffits, Wood, Vinyl, Metal</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.4.3.5</u>	<u>Fascia, Wood, Vinyl</u>	<u>20</u>	<u>20</u>
-	-	-	<u>3.3.4.3.6</u>	<u>Roof Hatch</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.4.3.7</u>	<u>Service Door</u>	<u>30</u>	<u>30</u>
-	-	-	<u>3.3.4.3.8</u>	<u>Roof Skylight</u>	<u>30</u>	<u>30</u>
<u>3.4</u>	-	-	-	<b><u>SYSTEM: Mech.-Elect.-Plumbing</u></b>	-	-
-	<u>3.4.1</u>	-	-	<b><u>Plumbing</u></b>	-	-
-	-	<u>3.4.1.1</u>	-	<b><u>Water Supply and Waste Piping</u></b>	-	-
-	-	-	<u>3.4.1.1.1</u>	<u>PVC/CPVC pipe, supply and waste</u>	<u>75</u>	<u>75</u>
-	-	-	<u>3.4.1.1.2</u>	<u>Copper/brass hard pipe, supply</u>	<u>75</u>	<u>75</u>
-	-	-	<u>3.4.1.1.3</u>	<u>Copper Tube, supply</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.4.1.1.4</u>	<u>Galvanized pipe, supply</u>	<u>40</u>	<u>40</u>
-	-	-	<u>3.4.1.1.5</u>	<u>Cast iron sanitary waste</u>	<u>75</u>	<u>75</u>
-	-	-	<u>3.4.1.1.6</u>	<u>Domestic Cold Water Pumps</u>	<u>20</u>	<u>20</u>

-	-	-	<a href="#">3.4.1.1.7</a>	<a href="#">Sewage Ejectors</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.1.1.8</a>	<a href="#">Commercial Sump Pump</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.1.1.9</a>	<a href="#">Residential Sump Pump</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.1.10</a>	<a href="#">Water Softener/Filtration</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	<a href="#">3.4.1.2</a>	-	<b><a href="#">Domestic Water Heating</a></b>	-	-
-	-	-	<a href="#">3.4.1.2.1</a>	<a href="#">DHW circulating pumps</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.2.2</a>	<a href="#">DHW storage tanks</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.2.3</a>	<a href="#">Exchanger, in tank or boiler</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.2.4</a>	<a href="#">External tankless heater, gas or electric</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.1.2.5</a>	<a href="#">Solar hot water</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.1.2.6</a>	<a href="#">Residential hot water heater, gas or electric</a>	<a href="#">12</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.2.7</a>	<a href="#">Flue, gas water heaters</a>	<a href="#">35</a>	<a href="#">35</a>
-	-	<a href="#">3.4.1.3</a>	-	<b><a href="#">Fixtures</a></b>	-	-
-	-	-	<a href="#">3.4.1.3.1</a>	<a href="#">Faucets &amp; valves</a>	<a href="#">15</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.1.3.2</a>	<a href="#">Bath tubs &amp; sinks, cast iron</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.4.1.3.3</a>	<a href="#">Baths tubs &amp; sinks, enameled or stainless steel, fiberglass</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.1.3.4</a>	<a href="#">Bath tubs &amp; sinks, porcelain</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.1.3.5</a>	<a href="#">Toilets/bidets/urinals</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.1.3.6</a>	<a href="#">Flush valves</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.1.3.7</a>	<a href="#">Tub/shower units or integrated assemblies</a>	<a href="#">30</a>	<a href="#">30</a>
-	<a href="#">3.4.2</a>	-	-	<b><a href="#">Centralized HVAC Systems</a></b>	-	-
-	-	<a href="#">3.4.2.1</a>	-	<b><a href="#">Centralized Heating/Cooling Equipment</a></b>	-	-
-	-	-	<a href="#">3.4.2.1.1</a>	<a href="#">Boilers, Oil Fired, Sectional</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.2</a>	<a href="#">Boilers, Gas/Dual Fuel, Sectional</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.3</a>	<a href="#">Boilers, Gas/Dual Fuel, Low MBH</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.4.2.1.4</a>	<a href="#">Boilers, Gas/Dual Fuel, High MBH</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.2.1.5</a>	<a href="#">Boilers, Gas Fired Atmospheric</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.6</a>	<a href="#">Boilers, Electric</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.2.1.7</a>	<a href="#">Boiler Blowdown and Water Treatment</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.8</a>	<a href="#">Boiler Room Pipe Insulation</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.9</a>	<a href="#">Boiler Room Piping</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.2.1.10</a>	<a href="#">Boiler Room Valves</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.11</a>	<a href="#">Boiler Temperature Controls</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.2.1.12</a>	<a href="#">Heat Exchanger</a>	<a href="#">35</a>	<a href="#">35</a>
-	-	-	<a href="#">3.4.2.1.13</a>	<a href="#">Combustion Air, Duct with Fixed Louvers</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.4.2.1.14</a>	<a href="#">Combustion Air, Motor Louvers and Duct</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.15</a>	<a href="#">Combustion Waste Flue</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.2.1.16</a>	<a href="#">Cooling tower</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.1.17</a>	<a href="#">Chilling plant</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.2.1.18</a>	<a href="#">Steam supply station</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.2.1.19</a>	<a href="#">Free standing chimney</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	<a href="#">3.4.2.2</a>	-	<b><a href="#">Centralized Heat/Air/Fuel Distribution</a></b>	-	-
-	-	-	<a href="#">3.4.2.2.1</a>	<a href="#">Fuel oil/propane storage tanks</a>	<a href="#">40</a>	<a href="#">40</a>

-	-	-	<a href="#">3.4.2.2.2</a>	<a href="#">Remediate/remove abandoned tanks/fuel lines</a>	<a href="#">100</a>	<a href="#">100</a>
-	-	-	<a href="#">3.4.2.2.3</a>	<a href="#">Fuel transfer system</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.2.4</a>	<a href="#">Gas/oil distribution lines</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.2.2.5</a>	<a href="#">Gas meter</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.2.2.6</a>	<a href="#">2 pipe/4 pipe hydronic distribution-above grade</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.2.2.7</a>	<a href="#">2 pipe/4 pipe hydronic distribution-in ground</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.2.2.8</a>	<a href="#">Hydronic/Water Circulating Pumps</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.2.2.9</a>	<a href="#">Hydronic/Water Controller</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.2.2.10</a>	<a href="#">Radiation-steam/hydronic (baseboard or freestanding radiator)</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.2.2.11</a>	<a href="#">Fan Coil Unit, Hydronic</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.4.2.2.12</a>	<a href="#">Central exhaust fans/blowers</a>	<a href="#">20</a>	<a href="#">20</a>
-	<a href="#">3.4.3</a>	-	-	<b><a href="#">Decentralized and Split HVAC Systems</a></b>	-	-
-	-	<a href="#">3.4.3.1</a>	-	<b><a href="#">Dwelling/Common Area HVAC Equipment</a></b>	-	-
-	-	-	<a href="#">3.4.3.1.1</a>	<a href="#">Electric heat pump, condenser, pad or rooftop</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.3.1.2</a>	<a href="#">Electric AC condenser, pad or rooftop</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.3.1.3</a>	<a href="#">Electric furnace/air handler</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.4</a>	<a href="#">Gas furnace/air handler</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.5</a>	<a href="#">Hydronic heat/electric AC air handler</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.3.1.6</a>	<a href="#">Hydronic feed electric heat pump/air handler</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.3.1.7</a>	<a href="#">Wall mounted electric/gas heater</a>	<a href="#">25</a>	<a href="#">25</a>
-	-	-	<a href="#">3.4.3.1.8</a>	<a href="#">Electric baseboard heater</a>	<a href="#">30</a>	<a href="#">30</a>
-	-	-	<a href="#">3.4.3.1.9</a>	<a href="#">PTAC Thruwall (packaged terminal air conditioning)</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.3.1.10</a>	<a href="#">Window or thru-wall air conditioners</a>	<a href="#">10</a>	<a href="#">10</a>
-	-	-	<a href="#">3.4.3.1.11</a>	<a href="#">Package HVAC roof top</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.3.1.12</a>	<a href="#">Air filtration/humidity control devices (humidifiers, HRV's)</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.13</a>	<a href="#">Duct, rigid sheet metal, insulated if not in conditioned space</a>	<a href="#">35</a>	<a href="#">35</a>
-	-	-	<a href="#">3.4.3.1.14</a>	<a href="#">Duct, flexible, insulated</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.15</a>	<a href="#">Duct, sealing-mastic or UL 181A or 181B tape.</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.16</a>	<a href="#">Diffusers, registers</a>	<a href="#">20</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.1.17</a>	<a href="#">Fireplace, masonry &amp; firebrick, masonry chimney</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.4.3.1.18</a>	<a href="#">Fireplace, factory assembled</a>	<a href="#">35</a>	<a href="#">35</a>
-	-	-	<a href="#">3.4.3.1.19</a>	<a href="#">Fireplace insert, stove</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.3.1.20</a>	<a href="#">Chimneys, metal, and chimney covers</a>	<a href="#">35</a>	<a href="#">35</a>
-	-	<a href="#">3.4.3.2</a>	-	<b><a href="#">HVAC Controls</a></b>	-	-
-	-	-	<a href="#">3.4.3.2.1</a>	<a href="#">Dwelling/common area thermostat</a>	<a href="#">15</a>	<a href="#">20</a>
-	-	-	<a href="#">3.4.3.2.2</a>	<a href="#">Heat sensors</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.4.3.2.3</a>	<a href="#">Outdoor temperature sensor</a>	<a href="#">10</a>	<a href="#">10</a>
-	<a href="#">3.4.4</a>	-	-	<b><a href="#">Electrical</a></b>	-	-
-	-	<a href="#">3.4.4.1</a>	-	<b><a href="#">Electric Service &amp; Metering</a></b>	-	-
-	-	-	<a href="#">3.4.4.1.1</a>	<a href="#">Building service panel</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.4.4.1.2</a>	<a href="#">Building meter</a>	<a href="#">40</a>	<a href="#">40</a>
-	-	-	<a href="#">3.4.4.1.3</a>	<a href="#">Tenant meters, meter panel</a>	<a href="#">40</a>	<a href="#">40</a>

-	-	<u>3.4.4.2</u>	-	<b>Electrical Distribution</b>	-	-
-	-	-	<u>3.4.4.2.1</u>	Tenant electrical panel	50	50
-	-	-	<u>3.4.4.2.2</u>	Unit/building wiring	50	50
-	-	<u>3.4.4.3</u>	-	<b>Electric Lighting &amp; Fixtures</b>	-	-
-	-	-	<u>3.4.4.3.1</u>	Switches & outlets	35	35
-	-	-	<u>3.4.4.3.2</u>	Lighting - exterior entry	15	20
-	-	-	<u>3.4.4.3.3</u>	Lighting- interior common space	25	30
-	-	-	<u>3.4.4.3.4</u>	Lighting - Tenant Spaces	20	25
-	-	-	<u>3.4.4.3.5</u>	Door bells, chimes	20	25
-	-	<u>3.4.4.4</u>	-	<b>Telecommunications Equipment</b>	-	-
-	-	-	<u>3.4.4.4.1</u>	Satellite dishes/antennae	20	20
-	-	-	<u>3.4.4.4.2</u>	Telecom panels & controls	20	20
-	-	-	<u>3.4.4.4.3</u>	Telecom cabling & outlets	20	20
<u>3.5</u>	-	-	-	<b>SYSTEM: Vertical Transportation</b>	-	-
-	<u>3.5.1</u>	-	-	<b>Elevators/Escalators</b>	-	-
-	-	<u>3.5.1.1</u>	-	Electrical switchgear	50	50
-	-	<u>3.5.1.2</u>	-	Electrical wiring	30	30
-	-	<u>3.5.1.3</u>	-	Elevator controller, call, dispatch, emergency	10	20
-	-	<u>3.5.1.4</u>	-	Elevator cab, interior finish	10	20
-	-	<u>3.5.1.5</u>	-	Elevator cab, frame	35	50
-	-	<u>3.5.1.6</u>	-	Elevator, machinery	20	30
-	-	<u>3.5.1.7</u>	-	Elevator, shaftway doors	10	20
-	-	<u>3.5.1.8</u>	-	Elevator, shaftway hoist rails, cables, traveling	20	25
-	-	<u>3.5.1.9</u>	-	Elevator, shaftway hydraulic piston and leveling	20	25
-	-	<u>3.5.1.10</u>	-	Escalators	50	50
<u>3.6</u>	-	-	-	<b>SYSTEM: Life Safety/Fire Protection</b>	-	-
-	<u>3.6.1</u>	-	-	<b>Sprinklers and Standpipes</b>	-	-
-	-	<u>3.6.1.1</u>	-	Building fire supression sprinklers, standpipes	50	50
-	-	<u>3.6.1.2</u>	-	Fire pumps	20	20
-	-	<u>3.6.1.3</u>	-	Fire hose stations	50	50
-	-	<u>3.6.1.4</u>	-	Fire extinguishers	10	15
-	<u>3.6.2</u>	-	-	<b>Alarm, Security &amp; Emergency Systems</b>	-	-
-	-	<u>3.6.2.1</u>	-	Tenant space alarm systems	10	15
-	-	<u>3.6.2.2</u>	-	Residential smoke detectors	5	7
-	-	<u>3.6.2.3</u>	-	Call station	10	15
-	-	<u>3.6.2.4</u>	-	Emergency/auxillary generator	25	25
-	-	<u>3.6.2.5</u>	-	Emergency/auxillary fuel storage tank	25	25
-	-	<u>3.6.2.6</u>	-	Emergency lights, illuminated signs	5	10
-	-	<u>3.6.2.7</u>	-	Smoke and fire detection system, central panel	15	15
-	-	<u>3.6.2.8</u>	-	Buzzer/intercom, central panel	20	20
-	-	<u>3.6.2.9</u>	-	Tenant buzzer / intercom /secured entry system	20	20
-	<u>3.6.3</u>	-	-	<b>Other Systems</b>	-	-
-	-	<u>3.6.3.1</u>	-	Pneumatic Lines and Controls	30	30

-	-	<u>3.6.3.2</u>	-	<u>Auto-securing doors/entries/lock down</u>	<u>30</u>	<u>30</u>
<u>3.7</u>	-	-	-	<u>SYSTEM: Interior Elements</u>	-	-
-	<u>3.7.1</u>	-	-	<u>Interiors-Common Areas</u>	-	-
-	-	<u>3.7.1.1</u>	-	<u>Finished walls, ceilings, floors</u>	-	-
-	-	-	<u>3.7.1.1.1</u>	<u>Drywall</u>	<u>35</u>	<u>40</u>
-	-	-	<u>3.7.1.1.2</u>	<u>Plaster</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.7.1.1.3</u>	<u>Paints, stains, clear finishes, interior</u>	<u>15</u>	<u>20</u>
-	-	-	<u>3.7.1.1.4</u>	<u>Wallpapers</u>	<u>15</u>	<u>20</u>
-	-	-	<u>3.7.1.1.5</u>	<u>Wall tile, ceramic, glass, natural stone</u>	<u>35</u>	<u>50</u>
-	-	-	<u>3.7.1.1.6</u>	<u>Floor tile, ceramic, natural stone</u>	<u>40</u>	<u>50</u>
-	-	-	<u>3.7.1.1.7</u>	<u>Concrete/Masonry/Terrazo</u>	<u>75</u>	<u>75</u>
-	-	-	<u>3.7.1.1.8</u>	<u>Hardwood floor (3/4" strip or parquet)</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.7.1.1.9</u>	<u>Wood floor, laminated/veneered</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.1.10</u>	<u>Resilient tile or sheet floor (vinyl, linoleum)</u>	<u>15</u>	<u>20</u>
-	-	-	<u>3.7.1.1.11</u>	<u>Carpet</u>	<u>6</u>	<u>10</u>
-	-	-	<u>3.7.1.1.12</u>	<u>Acoustic tile/drop ceiling</u>	<u>15</u>	<u>20</u>
-	-	<u>3.7.1.2</u>	-	<u>Millwork (doors, trim, cabinets, tops)</u>	-	-
-	-	-	<u>3.7.1.2.1</u>	<u>Interior, hollow core doors</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.2.2</u>	<u>Interior doors, solid core, wood, metal clad, fire rated</u>	<u>30</u>	<u>35</u>
-	-	-	<u>3.7.1.2.3</u>	<u>Door trim</u>	<u>20</u>	<u>30</u>
-	-	-	<u>3.7.1.2.4</u>	<u>Wall trim (base, chair rail, crown moldings)</u>	<u>30</u>	<u>35</u>
-	-	-	<u>3.7.1.2.5</u>	<u>Passage &amp; lock sets</u>	<u>15</u>	<u>20</u>
-	-	-	<u>3.7.1.2.6</u>	<u>Bifold &amp; sliding doors</u>	<u>15</u>	<u>20</u>
-	-	-	<u>3.7.1.2.7</u>	<u>Cabinets &amp; vanities</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.2.8</u>	<u>Tops, granite, natural stone, engineered stone</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.7.1.2.9</u>	<u>Tops, solid surface, stainless steel</u>	<u>40</u>	<u>50</u>
-	-	-	<u>3.7.1.2.10</u>	<u>Tops, plastic laminates, wood</u>	<u>15</u>	<u>25</u>
-	-	-	<u>3.7.1.2.11</u>	<u>Vanity tops, cultured marble, molded acrylic, fiberglass</u>	<u>25</u>	<u>35</u>
-	-	<u>3.7.1.3</u>	-	<u>Appliances</u>	-	-
-	-	-	<u>3.7.1.3.1</u>	<u>Refrigerator/freezer</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.7.1.3.2</u>	<u>Range, cook top, wall oven</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.3.3</u>	<u>Range hood</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.3.4</u>	<u>Microwave</u>	<u>10</u>	<u>10</u>
-	-	-	<u>3.7.1.3.5</u>	<u>Disposal (food waste)</u>	<u>7</u>	<u>10</u>
-	-	-	<u>3.7.1.3.6</u>	<u>Compactors (interior, residential grade)</u>	<u>7</u>	<u>10</u>
-	-	-	<u>3.7.1.3.7</u>	<u>Dishwasher</u>	<u>10</u>	<u>15</u>
-	-	-	<u>3.7.1.3.8</u>	<u>Clothes washer/dryer</u>	<u>10</u>	<u>15</u>
-	-	<u>3.7.1.4</u>	-	<u>Specialties</u>	-	-
-	-	-	<u>3.7.1.4.1</u>	<u>Interior Mail Facility</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.4.2</u>	<u>Common area bath accessories</u>	<u>7</u>	<u>12</u>
-	-	-	<u>3.7.1.4.3</u>	<u>Mirrors &amp; medicine cabinets</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.4.4</u>	<u>Closet/storage specialties, shelving</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.1.4.5</u>	<u>Common area interior stairs</u>	<u>50</u>	<u>50</u>

-	-	-	<a href="#">3.7.1.4.6</a>	<a href="#">Common area railings</a>	<a href="#">15</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.1.4.7</a>	<a href="#">Bath/kitchen vent/exhaust fans</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.1.4.8</a>	<a href="#">Ceiling fans</a>	<a href="#">15</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.1.4.9</a>	<a href="#">Window treatments, drapery rods, shades, blinds, etc</a>	<a href="#">15</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.1.4.10</a>	<a href="#">Indoor recreation and fitness equipment</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.1.4.11</a>	<a href="#">Entertainment centers, theatre projection and seating</a>	<a href="#">15</a>	<a href="#">25</a>
-	<a href="#">3.7.2</a>	-	-	<b><a href="#">Interiors-Dwelling Units</a></b>		
-	-	<a href="#">3.7.2.1</a>	-	<b><a href="#">Finished walls, ceilings, floors</a></b>		
-	-	-	<a href="#">3.7.2.1.1</a>	<a href="#">Drywall</a>	<a href="#">35</a>	<a href="#">40</a>
-	-	-	<a href="#">3.7.2.1.2</a>	<a href="#">Plaster</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.7.2.1.3</a>	<a href="#">Paints, stains, clear finishes, interior</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.2.1.4</a>	<a href="#">Wallpapers</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.2.1.5</a>	<a href="#">Wall tile, ceramic, glass, natural stone</a>	<a href="#">30</a>	<a href="#">40</a>
-	-	-	<a href="#">3.7.2.1.6</a>	<a href="#">Floor tile, ceramic, natural stone</a>	<a href="#">40</a>	<a href="#">50</a>
-	-	-	<a href="#">3.7.2.1.7</a>	<a href="#">Concrete/Masonry/Terrazzo</a>	<a href="#">75</a>	<a href="#">75</a>
-	-	-	<a href="#">3.7.2.1.8</a>	<a href="#">Hardwood floor (3/4" strip or parquet)</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.7.2.1.9</a>	<a href="#">Wood floor, laminated/veneered</a>	<a href="#">15</a>	<a href="#">20</a>
-	-	-	<a href="#">3.7.2.1.10</a>	<a href="#">Resilient tile or sheet floor (vinyl, linoleum)</a>	<a href="#">15</a>	<a href="#">20</a>
-	-	-	<a href="#">3.7.2.1.11</a>	<a href="#">Carpet</a>	<a href="#">6</a>	<a href="#">10</a>
-	-	-	<a href="#">3.7.2.1.12</a>	<a href="#">Acoustic tile/drop ceiling</a>	<a href="#">15</a>	<a href="#">20</a>
-	-	<a href="#">3.7.2.2</a>	-	<b><a href="#">Millwork (doors, trim, cabinets, tops)</a></b>		
-	-	-	<a href="#">3.7.2.2.1</a>	<a href="#">Interior, hollow core doors</a>	<a href="#">20</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.2.2.2</a>	<a href="#">Interior doors, solid core, wood, metal clad</a>	<a href="#">30</a>	<a href="#">35</a>
-	-	-	<a href="#">3.7.2.2.3</a>	<a href="#">Door trim</a>	<a href="#">20</a>	<a href="#">30</a>
-	-	-	<a href="#">3.7.2.2.4</a>	<a href="#">Wall trim (base, chair rail, crown moldings)</a>	<a href="#">25</a>	<a href="#">35</a>
-	-	-	<a href="#">3.7.2.2.5</a>	<a href="#">Passage &amp; lock sets</a>	<a href="#">12</a>	<a href="#">20</a>
-	-	-	<a href="#">3.7.2.2.6</a>	<a href="#">Bifold &amp; sliding doors</a>	<a href="#">12</a>	<a href="#">20</a>
-	-	-	<a href="#">3.7.2.2.7</a>	<a href="#">Cabinets &amp; vanities</a>	<a href="#">20</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.2.2.8</a>	<a href="#">Tops, granite, natural stone, engineered stone</a>	<a href="#">50</a>	<a href="#">50</a>
-	-	-	<a href="#">3.7.2.2.9</a>	<a href="#">Tops, solid surface, stainless steel</a>	<a href="#">40</a>	<a href="#">50</a>
-	-	-	<a href="#">3.7.2.2.10</a>	<a href="#">Tops, plastic laminates, wood</a>	<a href="#">15</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.2.2.11</a>	<a href="#">Vanity tops, cultured marble, molded acrylic, fiberglass</a>	<a href="#">25</a>	<a href="#">35</a>
-	-	<a href="#">3.7.2.3</a>	-	<b><a href="#">Appliances</a></b>		
-	-	-	<a href="#">3.7.2.3.1</a>	<a href="#">Refrigerator/freezer</a>	<a href="#">12</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.2.3.2</a>	<a href="#">Range, cook top, wall oven</a>	<a href="#">15</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.2.3.3</a>	<a href="#">Range hood</a>	<a href="#">15</a>	<a href="#">25</a>
-	-	-	<a href="#">3.7.2.3.4</a>	<a href="#">Microwave</a>	<a href="#">10</a>	<a href="#">10</a>
-	-	-	<a href="#">3.7.2.3.5</a>	<a href="#">Disposal (food waste)</a>	<a href="#">7</a>	<a href="#">10</a>
-	-	-	<a href="#">3.7.2.3.6</a>	<a href="#">Compactors (interior, residential grade)</a>	<a href="#">7</a>	<a href="#">10</a>
-	-	-	<a href="#">3.7.2.3.7</a>	<a href="#">Dishwasher</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	-	<a href="#">3.7.2.3.8</a>	<a href="#">Clothes washer/dryer</a>	<a href="#">10</a>	<a href="#">15</a>
-	-	<a href="#">3.7.2.4</a>	-	<b><a href="#">Specialties</a></b>		

-	-	-	<u>3.7.2.4.1</u>	<u>Bath accessories (towel bars, grab bars, etc)</u>	<u>7</u>	<u>12</u>
-	-	-	<u>3.7.2.4.2</u>	<u>Mirrors &amp; medicine cabinets</u>	<u>15</u>	<u>25</u>
-	-	-	<u>3.7.2.4.3</u>	<u>Closet/storage specialties, shelving</u>	<u>15</u>	<u>25</u>
-	-	-	<u>3.7.2.4.4</u>	<u>Interior stairs</u>	<u>50</u>	<u>50</u>
-	-	-	<u>3.7.2.4.5</u>	<u>Stair and loft railings</u>	<u>20</u>	<u>25</u>
-	-	-	<u>3.7.2.4.6</u>	<u>Bath/kitchen vent/exhaust fans</u>	<u>15</u>	<u>15</u>
-	-	-	<u>3.7.2.4.7</u>	<u>Ceiling fans</u>	<u>10</u>	<u>15</u>
-	-	-	<u>3.7.2.4.8</u>	<u>Window treatments, drapery rods, shades, blinds, etc</u>	<u>10</u>	<u>20</u>
-	-	-	-	<u>Additional Considerations</u>	-	-
<u>4.1</u>	-	-	-	<u>Environmental Measures (not elsewhere defined)</u>	-	-
-	<u>4.1.1</u>	-	-	<u>Radon mitigation system periodic tests</u>	<u>5</u>	<u>5</u>
-	<u>4.1.2</u>	-	-	<u>Environmental remediation system periodic tests</u>	<u>5</u>	<u>5</u>
-	<u>4.1.3</u>	-	-	<u>Environmental remediation alarms</u>	<u>5</u>	<u>5</u>
-	<u>4.1.4</u>	-	-	<u>Environmental remediation pumps &amp; equipment</u>	<u>5</u>	<u>5</u>
-	<u>4.1.5</u>	-	-	<u>Mold-treat-remediate (see other items for paint, drywall, etc.)</u>	<u>100</u>	<u>100</u>
<u>4.2</u>	-	-	-	<u>Lead based paint, asbestos remediation</u>	-	-
-	<u>4.2.1</u>	-	-	<u>Testing</u>	<u>100</u>	<u>100</u>
-	<u>4.2.2</u>	-	-	<u>Lead based paint encapsulation</u>	<u>10</u>	<u>10</u>
-	<u>4.2.3</u>	-	-	<u>Lead based paint (remove)</u>	<u>100</u>	<u>100</u>
-	<u>4.2.4</u>	-	-	<u>Asbestos (remove)</u>	<u>100</u>	<u>100</u>
<u>4.3</u>	-	-	-	<u>Commercial Tenant Improvements</u>	-	-
-	<u>4.3.1</u>	-	-	<u>Owner provided item(s) (specify)</u>	<u>5</u>	<u>5</u>
-	<u>4.3.2</u>	-	-	<u>Owner provided \$ allowance (specify)</u>	<u>5</u>	<u>5</u>

<b>SITE--Utilities/Development</b>	<b>Type</b>	<b>Family</b>	<b>Senior</b>	<b>Notes</b>
<b>Sanitary treatment [MS4]</b>		40	40	
<b>Lift station motors</b>		10	10	
<b>Lift station enclosures</b>		30+	30+	
<b>Site sanitary lines</b>		40	40	
<b>Site sewer main</b>		40	40	
<b>Site water main</b>		40	40	
<b>Water tower</b>		50+	50+	
<b>Storm drain lines</b>		40	40	
<b>Catch basin</b>		40	40	
<b>Site gas main</b>		40	40	
<b>Site lighting</b>		25	25	
<b>Irrigation systems</b>		30	30	
<b>Earthwork/Grading</b>		50+	50+	
<b>SITE--Amenities</b>	<b>Type</b>	<b>Family</b>	<b>Senior</b>	
<b>Roadways</b>	<b>Asphalt (sealing)</b>	5	5	
	<b>Asphalt</b>	25	25	

<b>Parking</b>	—Asphalt	25	25	
<b>Pedestrian paving</b>	—Bituminous	15	15	
	Concrete	30	30	
<b>Dumpster enclosures</b>		10	10	
<b>Mail facilities (also under Interiors)</b>		20	30	
<b>Landscaping</b>		20	30	
<b>Fencing</b>	—Chain link	25	25	
	—Vinyl post & panel	25	25	
	Stockade	15	15	
	Post and rail	15	15	
<b>Built improvements (playgrounds/site furniture)</b>		20	20	
<b>STRUCTURAL</b>		<b>Family</b>	<b>Senior</b>	
<b>Chimney</b>		25	25	<i>Repair only</i>
<b>Foundations</b>		50+	50+	
<b>Exterior stairs</b>	—Wood	30	30	
	—Filled metal pan	20	20	
	—Concrete	25	25	
<b>Fire escape</b>		40	40	
<b>Exterior walls</b>	Aluminum siding	15	15	
	Brick or Block	40	40	
	Stone veneer	20	20	
	Glass block	15	15	
	Granite block	40	40	
	Metal/Glass curtain wall	10	10	
	Precast concrete panel	15	15	
	Vinyl siding 0.030 to 0.040	15	15	
	Vinyl siding 0.042 to 0.055	30	30	
	Wood siding/ shingles	5	5	
	Portland cement stucco	30	30	
<b>Parapet wall</b>		30	30	
<b>Basement stairs</b>		50+	50+	
<b>Waterproofing foundation</b>		50+	50+	
<b>Bulkheads</b>		6	20	
<b>Retaining walls</b>	—Concrete	20	20	
	Masonry	15	15	
	Wood	15	15	
	Stone	15	15	
<b>Wood floor framing</b>		50+	50+	
<b>Stair structure</b>		50+	50+	
<b>Roof structure</b>		50+	50+	
<b>Porches</b>		50	50	
<b>Wood decks</b>		20	20	
<b>Storage sheds/Accessory buildings</b>		30	30	
<b>Garports</b>		40	40	



<b>Garages</b>		50+	50+	
<b>Canopies</b>	Wood/Metal	40	40	
	Concrete	20	20	
<b>EXTERIOR-ENVELOPE</b>		<b>Family</b>	<b>Senior</b>	
<b>Ceilings, exterior or open</b>		5	5	
<b>Exterior doors</b>	Aluminum storefront	20+	30+	
	Steel commercial	20	20	
	Steel residential	40	20	
	Wood residential	20+	30+	
	Historic	Per SHPO	Per SHPO	
<b>Storm/Screen doors</b>		7	15	
<b>Storm/Screen windows</b>		20	20	
<b>Windows</b>	Single pane and/or metal non-thermally broken	20	20	<i>Not permitted as replacement unless SHPO recommended</i>
	Aluminum storefront	20+	20+	
	Aluminum thermal broken	30+	30+	
	Vinyl thermal pane	30+	30+	
	Historic	Per SHPO	Per SHPO	
<b>Window frames &amp; glazing</b>		30	30	
<b>Window security</b>		40	40	
<b>Roof covering</b>	Aluminum shingles	40	40	
	Asphalt shingles	30	30	
	Built up (BUR)	20	20	<i>Repair only, not permitted as replacement</i>
	Membrane	20	20	
	Metal	40	40	
	Shingles (slate, tile, clay, etc.)	50+	50+	
<b>Roof drainage, exterior (gutter, downspouts, splash blocks, rwc boots)</b>		25	25	
<b>Roof drainage, interior (drain covers)</b>		50+	50+	
<b>Flashing, fascia, and trim</b>		20+	20+	
<b>Roof railings</b>		40	40	
<del><b>Hatches/Skylights</b></del>	Access hatch	30	30	
	Smoke hatch/skylight	25	25	
<del><b>Service doors</b></del>		25	25	
<del><b>Soffits</b></del>	Wood	5	5	<i>Not permitted as replacement unless SHPO recommended</i>
	Aluminum or Vinyl	25	25	
	Concrete Board/ Fiber Cement	50+	50+	
<b>INTERIORS</b>		<b>Family</b>	<b>Senior</b>	

<b>Common Area: Doors</b>	Solid-core/steel	20+	30+	
<b>Common Area: Floors</b>	Historic/Terrazzo	50+	50+	
	T&G hardwood	30+	30+	
	Resilient, vinyl plank	10+	20+	
	Resilient, sheet vinyl	10+	20+	
	Resilient, other (epoxy)	10+	20+	
	VCT	15+	20+	
	Ceramic tile	30+	50+	
<b>Common Area: Railings</b>		30+	30+	
<b>Common Area: Ceilings</b>	Concrete/Drywall/Plaster	50+	50+	
	Acoustic Tile	20	20	
<b>Common Area: Countertop/sink</b>		20	20	
<b>Common Area: Bathroom accessories</b>		20+	30+	
<b>Common Area: Dishwasher</b>		10	15	
<b>Common Area: Disposal</b>		5	8	
<b>Common Area: Walls</b>		50+	50+	
<b>Common Area: Kitchen cabinets</b>	HUD-spec/plywood/solid wood	20+	30+	
	Wood construction	20	25	
<b>Common Area: Refrigerator</b>		15	15	
<b>Insulation/Wall</b>		50+	50+	
<b>Mail facilities</b>		20	30	
<b>Dwelling Unit: Slab</b>		50+	50+	
<b>Dwelling Unit: Floors</b>	Carpet—solution-dyed nylon	10	20	
	Carpet—olefin	7	10	<i>Must be replaced with OHFA-permitted material</i>
	T&G hardwood	20+	35+	
	Resilient, vinyl plank	15+	20+	
	Resilient, sheet vinyl	15+	20+	
	Resilient, other (epoxy)	15+	25+	
	VCT (no wax)	10+	25+	
	Ceramic tile	30+	30+	
	Concrete/ Stained	50+	50+	
<b>Dwelling Unit: Stair finishes</b>	Resilient/ rubber	20+	30+	
<b>Dwelling Unit: Bathroom accessories/vanities</b>		10	15	
<b>Dwelling Unit: Interior doors</b>	Solid-core doors	30	35+	
	Hollow-core doors	10	20	
	Glass doors	25	30	
<b>Dwelling Unit: Kitchen cabinets</b>	HUD-spec/plywood/solid wood	20+	30+	
	Wood construction	20	25	
<b>Dwelling Unit: Countertop/sink</b>		15+	20+	
<b>Dwelling Unit: Dishwasher</b>		10	15	
<b>Dwelling Unit: Disposal</b>		5	8	
<b>Dwelling Unit: Ceilings</b>	Concrete/Drywall/Plaster	50+	50+	

	Acoustic Tile	20	20	
<b>Dwelling Unit: Walls</b>		50+	50+	
<b>Dwelling Unit: Range</b>		15	20	
<b>Dwelling Unit: Range hood</b>		15	15	
<b>Dwelling Unit: Refrigerator</b>		15	15	
<b>ACCESSIBILITY</b>		<b>Family</b>	<b>Senior</b>	
<b>Sidewalk detectable warning strips</b>		5+	10+	
<b>Parking lot markings</b>		2+	2+	
<b>Parking signs</b>		5+	7+	
<b>Curb ramps</b>	Concrete	10+	10+	
<b>Accessibility ramps</b>	Concrete	20+	30+	
	Metal	15	15+	
	Wood	10	10	
<b>Entry door opener</b>		5+	5	
<b>Common area doors</b>	With kick plate protection	See solid core Doors	See solid core Doors	
<b>Common area wall guards</b>		5	10	
<b>Common area corner guards</b>		5	10	
<b>Common area bathroom fixtures</b>	Toilet and sink	15	20	
<b>Common area accessories</b>	Grab bars, towel and toilet paper dispensers	5	5	
<b>Accessible unit doors</b>	With kick plate protection	See solid core doors	See solid core doors	
<b>Accessible unit walls</b>	With 10" toe kick	20+	20+	
	No 10" toe kick protection	5+	10+	
<b>Accessible unit kitchens</b>		10+	20+	
<b>Accessible unit bathrooms</b>		10+	20+	
<b>PLUMBING SYSTEM</b>		<b>Family</b>	<b>Senior</b>	
<b>Gas distribution</b>		50+	50+	
<b>Tank water heater</b>	Electric	20+	20+	
	Gas	15-20	15-20	
<b>Tankless water heater, individual units</b>	Electric	20+	30+	
	Gas	20	25	
<b>Common Area plumbing fixtures (sink, toilet, tub)</b>		15	15	
<b>Dwelling Unit plumbing fixtures (sink, toilet, tub)</b>		20	20	
<b>Radiant heating</b>	Hydronic (baseboard or freestanding)	50	50	
<b>Unit level DHW</b>		10	10	
<b>Hot &amp; cold water distribution</b>		50	50	
<b>Sanitary waste &amp; vent system</b>		25	25	
<b>Sewage ejectors</b>		25	25	
<b>Sump pump</b>	Residential	7	7	
	Commercial	15	15	

HVAC-SYSTEM		Family	Senior	
<b>Unit HVAC</b>	Electric fan-coil	20	20	
	Electric heat/AC	15	15	
	Evap. condenser (swamp cooler)	20	20	
	Gas furnace, split-DX-AC	20	20	
	Heat pump w/suppl. electric	15	15	
	Heat pump, water source	20	20	
	Hydronic fan-coil	30	30	
	Hydronic heat/electric-AC	20	20	
	Radiant steam heat	50	50	
	Electric base-board heat	15	15	<i>Must be replaced with OHFA-permitted option</i>
<b>Unit vent/exhaust</b>		15	15	
<b>Central unit exhaust, roof mounted</b>		20	20	
<b>Chilled water distribution</b>		25	25	
<b>Cooling tower</b>		40	40	
<b>HVAC</b>	Cooling only	15	15	
	Heat only	15	15	
	Heating & Cooling	15	15	
<b>Boiler room equipment/vents</b>		25	25	
<b>Boilers</b>	Oil-fired, sectional	22	22	
	Gas/dual fuel, sectional	25	25	
	Oil/gas/dual fired, low-MBH	30	30	
	Oil/gas/dual fired, high-MBH	40	40	
	Gas-fired atmospheric	25	25	
	Electric	20	20	
<b>DHW-generation</b>	Tank only, dedicated fuel	10	10	
	Boiler	15	15	
	External tankless	15	15	
	Instantaneous	20	20	
<b>DHW-storage tanks</b>	Small (up to 150gals)	12	12	
	Large (over 150gals)	7	7	
<b>Domestic cold-water booster pumps</b>		15	15	
<b>Flue exhaust</b>		w/boiler	w/boiler	
<b>Heat exchanger (HRV and/or condenser exchangers)</b>		35	35	
<b>Solar hot water</b>		20	20	
<b>Chillers</b>	Swamp	15+	15+	
	Geothermal	25+	25+	
	Air exchangers	20	20	
ELECTRICAL-SYSTEM		Family	Senior	
<b>Unit wiring</b>		99	99	
<b>Emergency generator/transfer gear</b>		35	35	

Emergency lights, battery operated		10	10	
Emergency generator		15	15	
Lighting, dwelling unit		20	20	
Residential stand-alone or linked smoke/fire detectors		10	10	
Building-mounted exterior lighting		6	10	
Building-mounted HID lighting		6	20	
Transformer		30	30	
Site power distribution		40	40	
Solar PV panels		40	40	
Solar Inverter		10+	10+	
Site electrical main		40	40	
Switches and outlets		20	20	
Lighting, common area		25	25	
<b>ELEVATORS</b>		<b>Family</b>	<b>Senior</b>	
Electrical switchgear		50+	50+	
Electrical wiring		50+	50+	
Elevator, cab, call station, etc.		15	15	
Elevator, machinery		25	25	
Combustion air	Duct w/fixed louvers	25	25	
<b>LIFE SAFETY/FIRE SYSTEM</b>		<b>Family</b>	<b>Senior</b>	
Smoke and fire control and annunciator panels		15+	15+	
Addressable detectors		10	10	
Flow alarms and controls		15	15	
Fire pumps		25+	25+	
Fire service pipes		40+	40+	
Sprinkler piping – wet		50+	50+	
Sprinkler piping – dry		30	30	
Sprinkler heads		15	15	
Sprinkler accessories (pull stations, sprinkler trim)		15	15	
Smoke & Fire Detection System, central panel		25	25	
Smoke/Fire Detectors		10	10	

## APPENDIX D: HOME PROPERTY STANDARDS

In addition to the Standards outlined in the DAS, for all projects receiving HOME funds the following provisions will be applicable as per [24 CFR § 92.251](#).

### § 92.251 Property standards.

#### (a) *New construction projects.*

**(1) State and local codes, ordinances, and zoning requirements.** Housing that is newly constructed with HOME funds must meet all applicable State and local codes, ordinances, and zoning requirements. HOME-assisted new construction projects must meet State or local residential and building codes, as applicable or, in the absence of a State or local building code, the International Residential Code or International Building Code (as applicable to the type of housing) of the International Code Council. The housing must meet the applicable requirements upon project completion.

**(2) HUD requirements.** All new construction projects must also meet the requirements described in this paragraph:

**(i) Accessibility.** The housing must meet the accessibility requirements of 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. Covered multifamily dwellings, as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619).

**(ii)** [Reserved]

**(iii) Disaster mitigation.** Where relevant, the housing must be constructed to mitigate the impact of potential disasters (e.g., earthquakes, hurricanes, flooding, and wildfires), in accordance with State and local codes, ordinances, or other State and local requirements, or such other requirements as HUD may establish.

**(iv) Written cost estimates, construction contracts and construction documents.** The participating jurisdiction must ensure the construction contract(s) and construction documents describe the work to be undertaken in adequate detail so that inspections can be conducted. The participating jurisdiction must review and approve written cost estimates for construction and determining that costs are reasonable.

**(v) Construction progress inspections.** The participating jurisdiction must conduct progress and final inspections of construction to ensure that work is done in accordance with the applicable codes, the construction contract, and construction documents.

**(vi) Broadband infrastructure.** For new commitments made after January 19, 2017 for a new construction housing project of a building with more than 4 rental units, the construction must include installation of broadband infrastructure, as this term is defined in 24 CFR 5.100, except where the participating jurisdiction determines and, in accordance with § 92.508(a)(3)(iv), documents the determination that:

**(A)** The location of the new construction makes installation of broadband infrastructure infeasible; or

(B) The cost of installing the infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden.

**(b) Rehabilitation projects.** All rehabilitation that is performed using HOME funds must meet the requirements of this paragraph (b).

**(1) Rehabilitation standards.** The participating jurisdiction must establish rehabilitation standards for all HOME-assisted housing rehabilitation activities that set forth the requirements that the housing must meet upon project completion. The participating jurisdiction's description of its standards must be in sufficient detail to determine the required rehabilitation work including methods and materials. The standards may refer to applicable codes or they may establish requirements that exceed the minimum requirements of the codes. The rehabilitation standards must address each of the following:

**(i) Health and safety.** The participating jurisdiction's standards must identify life-threatening deficiencies that must be addressed immediately if the housing is occupied.

**(ii) Major systems.** Major systems are: structural support; roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning. For rental housing, the participating jurisdiction's standards must require the participating jurisdiction to estimate (based on age and condition) the remaining useful life of these systems, upon project completion of each major systems. For multifamily housing projects of 26 units or more, the participating jurisdiction's standards must require the participating jurisdiction to determine the useful life of major systems through a capital needs assessment of the project. For rental housing, if the remaining useful life of one or more major system is less than the applicable period of affordability, the participating jurisdiction's standards must require the participating jurisdiction to ensure that a replacement reserve is established and monthly payments are made to the reserve that are adequate to repair or replace the systems as needed. For homeownership housing, the participating jurisdiction's standards must require, upon project completion, each of the major systems to have a remaining useful life for a minimum of 5 years or for such longer period specified by the participating jurisdiction, or the major systems must be rehabilitated or replaced as part of the rehabilitation work.

**(iii) Lead-based paint.** The participating jurisdiction's standards must require the housing to meet the lead-based paint requirements at 24 CFR part 35.

**(iv) Accessibility.** The participating jurisdiction's standards must require the housing to meet the accessibility requirements in 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. Covered multifamily dwellings, as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619). Rehabilitation may include improvements that are not required by regulation or statute that permit use by a person with disabilities.

**(v)** [Reserved]

**(vi) Disaster mitigation.** Where relevant, the participating jurisdiction's standards must require the housing to be improved to mitigate the impact of potential disasters (e.g., earthquake, hurricanes, flooding, and wildfires) in accordance with State and local codes, ordinances, and requirements.

**(vii) State and local codes, ordinances, and zoning requirements.** The participating jurisdiction's standards must require the housing to meet all applicable State and local codes, ordinances, and requirements or, in the absence of a State or local building code, the International Existing Building Code of the International Code Council.

**(viii) Uniform Physical Condition Standards.** The standards of the participating jurisdiction must be such that, upon completion, the HOME-assisted project and units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. HUD will establish the minimum deficiencies that must be corrected under the participating jurisdiction's rehabilitation standards based on inspectable items and inspected areas from HUD-prescribed physical inspection procedures (Uniform Physical Conditions Standards) pursuant to 24 CFR 5.705.

**(ix) Capital Needs Assessments.** For multifamily rental housing projects of 26 or more total units, the participating jurisdiction must determine all work that will be performed in the rehabilitation of the housing and the long-term physical needs of the project through a capital needs assessment of the project.

**(x) Broadband infrastructure.** For new commitments made after January 19, 2017 for a substantial rehabilitation project of a building with more than 4 rental units, any substantial rehabilitation, as defined in 24 CFR 5.100, must provide for installation of broadband infrastructure, as this term is also defined in 24 CFR 5.100, except where the participating jurisdiction determines and, in accordance with § 92.508(a)(3)(iv), documents the determination that:

- (A) The location of the substantial rehabilitation makes installation of broadband infrastructure infeasible;
- (B) The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden; or
- (C) The structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

**(2) Construction documents and cost estimates.** The participating jurisdiction must ensure that the work to be undertaken will meet the participating jurisdiction's rehabilitation standards. The construction documents (i.e., written scope of work to be performed) must be in sufficient detail to establish the basis for a uniform inspection of the housing to determine compliance with the participating jurisdiction's standards. The participating jurisdiction must review and approve a written cost estimate for rehabilitation after determining that costs are reasonable.

**(3) Frequency of inspections.** The participating jurisdiction must conduct an initial property inspection to identify the deficiencies that must be addressed. The participating jurisdiction must conduct progress and final inspections to determine that work was done in accordance with work write-ups.

### **(c) Acquisition of standard housing.**

**(1)** Existing housing that is acquired with HOME assistance for rental housing, and that was newly constructed or rehabilitated less than 12 months before the date of commitment of HOME funds, must meet the property standards of paragraph (a) or paragraph (b) of this section, as applicable, of this section for new construction and rehabilitation projects. The participating jurisdiction must document this compliance based upon a review of approved building plans and Certificates of Occupancy, and an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance.

**(2)** All other existing housing that is acquired with HOME assistance for rental housing must meet the rehabilitation property standards requirements of paragraph (b) of this section. The participating jurisdiction must document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance. If the property does not meet these standards, HOME funds cannot be used to acquire the property unless it is rehabilitated to meet the standards of paragraph (b) of this section.

**(3)** Existing housing that is acquired for homeownership (e.g., ~~downpayment~~ down payment assistance) must be decent, safe, sanitary, and in good repair. The participating jurisdiction must establish standards to determine that the housing is decent, safe, sanitary, and in good repair. At minimum, the standards must provide that the housing meets all applicable State and local housing quality standards and code requirements and the housing does not contain the specific deficiencies proscribed by HUD based on the applicable inspectable items and inspected areas in HUD-prescribed physical inspection procedures (Uniform Physical Condition Standards) issued pursuant to 24 CFR 5.705. The participating jurisdiction must inspect the housing and document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance. If the housing does not meet these standards, the housing must be rehabilitated to meet the standards of this paragraph (c)(3) or it cannot be acquired with HOME funds.

**(d) Occupied housing by tenants receiving HOME tenant-based rental assistance.** All housing occupied by tenants receiving HOME tenant-based rental assistance must meet the standards in 24 CFR 982.401, or the successor requirements as established by HUD.

**(e) Manufactured housing.** Construction of all manufactured housing including manufactured housing that replaces an existing substandard unit under the definition of "reconstruction" must meet the Manufactured Home Construction and Safety Standards codified at 24 CFR part 3280. These standards preempt State and local codes which are not identical to the federal standards for the new construction of manufactured housing. Participating jurisdictions providing HOME funds to assist manufactured housing units must comply with applicable State and local laws or codes. In the absence of such laws or codes, the installation must comply with the manufacturer's written instructions for installation of manufactured housing units. All new manufactured housing and all



manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must be on a permanent foundation that meets the requirements for foundation systems as set forth in 24 CFR 203.43f(c)(i). All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must, at the time of project completion, be connected to permanent utility hook-ups and be located on land that is owned by the manufactured housing unit owner or land for which the manufactured housing owner has a lease for a period at least equal to the applicable period of affordability. In HOME-funded rehabilitation of existing manufactured housing the foundation and anchoring must meet all applicable State and local codes, ordinances, and requirements or in the absence of local or state codes, the Model Manufactured Home Installation Standards at 24 CFR part 3285. Manufactured housing that is rehabilitated using HOME funds must meet the property standards requirements in paragraph (b) of this section, as applicable. The participating jurisdiction must document this compliance in accordance with inspection procedures that the participating jurisdiction has established pursuant to § 92.251, as applicable.

**(f) Ongoing property condition standards: Rental housing.**

**(1) Ongoing property standards.** The participating jurisdiction must establish property standards for rental housing (including manufactured housing) that apply throughout the affordability period. The standards must ensure that owners maintain the housing as decent, safe, and sanitary housing in good repair. The participating jurisdiction's description of its property standards must be in sufficient detail to establish the basis for a uniform inspection of HOME rental projects. The participating jurisdiction's ongoing property standards must address each of the following:

**(i) Compliance with State and local codes, ordinances, and requirements.** The participating jurisdiction's standards must require the housing to meet all applicable State and local code requirements and ordinances. In the absence of existing applicable State or local code requirements and ordinances, at a minimum, the participating jurisdiction's ongoing property standards must include all inspectable items and inspectable areas specified by HUD based on the HUD physical inspection procedures (Uniform Physical Condition Standards (UPCS)) prescribed by HUD pursuant to 24 CFR 5.705. The participating jurisdiction's property standards are not required to use any scoring, item weight, or level of criticality used in UPCS.

**(ii) Health and safety.** The participating jurisdiction's standards must require the housing to be free of all health and safety defects. The standards must identify life-threatening deficiencies that the owner must immediately correct and the time frames for addressing these deficiencies.

**(iii) Lead-based paint.** The participating jurisdiction's standards must require the housing to meet the lead-based paint requirements in 24 CFR part 35.

**(2) Projects to which HOME funds were committed before January 24, 2015** must meet all applicable State or local housing quality standards or code requirements, and if there are no such standard or code requirements, the housing must meet the housing quality standards in 24 CFR 982.401.

**(3) Inspections.** The participating jurisdiction must undertake ongoing property inspections, in accordance with § 92.504(d).

**(4) Corrective and remedial actions.** The participating jurisdiction must have procedures for ensuring that timely corrective and remedial actions are taken by the project owner to address identified deficiencies.

**(5) Inspection procedures.** The participating jurisdiction must establish written inspection procedures inspections. The procedures must include detailed inspection checklists, description of how and by whom inspections will be carried out, and procedures for training and certifying qualified inspectors. The procedures must also describe how frequently the property will be inspected, consistent with this section, § 92.209, and § 92.504(d).

## APPENDIX E: NHTF PROPERTY STANDARDS

In addition to the Standards outlined in the DAS, for all projects receiving NHTF funds the following provisions will be applicable as per [24 CFR § 93.301](#).

### § 93.301 Property standards.

#### (a) *New construction projects.*

(1) State and local codes, ordinances, and zoning requirements. Housing that is newly constructed with HTF funds must meet all applicable State and local codes, ordinances, and zoning requirements. HTF-assisted new construction projects must meet State or local residential and building codes, as applicable or, in the absence of a State or local building code, the International Residential Code or International Building Code (as applicable to the type of housing) of the International Code Council. The housing must meet the applicable requirements upon project completion.

(2) *HUD requirements.* All new construction projects must also meet the requirements described in this paragraph:

(i) *Accessibility.* The housing must meet the accessibility requirements of 24 CFR part 8, which implements section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with

Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. "Covered multifamily dwellings," as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619).

**(ii) Energy efficiency.** The housing must meet the energy efficiency standards established pursuant to section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12709).

**(iii) Disaster mitigation.** Where relevant, the housing must be constructed to mitigate the impact of potential disasters (e.g., earthquakes, hurricanes, flooding, and wildfires), in accordance with State and local codes, ordinances, or other State and local requirements, or such other requirements as HUD may establish.

**(iv) Written cost estimates, construction contracts, and construction documents.** The grantee must ensure the construction contract(s) and construction documents describe the work to be undertaken in adequate detail so that inspections can be conducted. The grantee must review and approve written cost estimates for construction and determine that costs are reasonable.

**(v) Construction progress inspections.** The grantee must conduct progress and final inspections of construction to ensure that work is done in accordance with the applicable codes, the construction contract, and construction documents.

**(vi) Broadband infrastructure.** For new commitments made after January 19, 2017 for a new construction housing project of a building with more than 4 rental units, the construction must include installation of broadband infrastructure, as this term is defined in 24 CFR 5.100, except where the grantee determines and, in accordance with § 93.407(a)(2)(iv), documents the determination that:

**(A)** The location of the new construction makes installation of broadband infrastructure infeasible; or

**(B)** The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden.

**(b) Rehabilitation projects.** All rehabilitation that is performed using HTF funds must meet the requirements of this paragraph (b).

**(1) Rehabilitation standards.** The grantee must establish rehabilitation standards for all HTF-assisted housing rehabilitation activities that set forth the requirements that the housing must meet upon project completion. The grantee's description of its standards must be in sufficient detail to determine the required rehabilitation work including methods and materials. The standards may refer to applicable codes or they may establish requirements that exceed the minimum requirements of the codes. The rehabilitation standards must address each of the following:

**(i) Health and safety.** The grantee's standards must identify life-threatening deficiencies that must be addressed immediately if the housing is occupied.

**(ii) Major systems.** Major systems are: structural support; roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning. For rental housing, the grantee's standards must require the grantee to estimate (based on age and condition) the remaining useful life of these systems, upon project completion of each major system. For multifamily housing projects of 26 units or more, the grantee's standards must require the grantee to determine the useful life of major systems through a capital needs assessment of the project. For rental housing, if the remaining useful life of one or more major system is less than the applicable period of affordability, the grantee's standards must require the grantee to ensure that a replacement reserve is established and monthly payments are made to the reserve that are adequate to repair or replace the systems as needed. For homeownership housing, the grantee's standards must require, upon project completion, each of the major systems to have a remaining useful life for a minimum of 5 years or for such longer period specified by grantee, or the major systems must be rehabilitated or replaced as part of the rehabilitation work.

**(iii) Lead-based paint.** The grantee's standards must require the housing to meet the lead-based paint requirements at 24 CFR part 35.

**(iv) Accessibility.** The grantee's standards must require the housing to meet the accessibility requirements in 24 CFR part 8, which implements section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. "Covered multifamily dwellings," as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619). Rehabilitation may include improvements that are not required by regulation or statute that permit use by a person with disabilities.

(v) [Reserved].

**(vi) Disaster mitigation.** Where relevant, the grantee's standards must require the housing to be improved to mitigate the impact of potential disasters (e.g., earthquake, hurricanes, flooding, and wildfires) in accordance with State and local codes, ordinances, and requirements, or such other requirements as HUD may establish.

**(vii) State and local codes, ordinances, and zoning requirements.** The grantee's standards must require the housing to meet all applicable State and local codes, ordinances, and requirements or, in the absence of a State or local building code, the International Existing Building Code of the International Code Council.

**(viii) Uniform Physical Condition Standards.** The standards of the grantee must be such that, upon completion, the HTF-assisted project and units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. HUD will establish the minimum deficiencies that must be corrected under the grantee's rehabilitation standards based on inspectable items and inspected areas from HUD-prescribed physical inspection procedures (Uniform Physical Conditions Standards) pursuant to 24 CFR 5.705.

**(ix) Capital Needs Assessments.** For multifamily rental housing projects of 26 or more total units, the grantee must determine all work that will be performed in the rehabilitation of the housing and the long-term physical needs of the project through a capital needs assessment of the project.

**(x) Broadband infrastructure.** For new commitments made after January 19, 2017 for a substantial rehabilitation project of a building with more than 4 rental units, any substantial rehabilitation, as defined in 24 CFR 5.100, must provide for installation of broadband infrastructure, as this term is also defined in 24 CFR 5.100, except where the grantee determines and, in accordance with § 93.407(a)(2)(iv), documents the determination that:

**(A)** The location of the substantial rehabilitation makes installation of broadband infrastructure infeasible;

**(B)** The cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden; or

**(C)** The structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

**(2) Construction documents and cost estimates.** The grantee must ensure that the work to be undertaken will meet the grantee's rehabilitation standards. The construction documents (i.e., written scope of work to be performed) must be in sufficient detail to establish the basis for a uniform inspection of the housing to determine compliance with the grantee's standards. The grantee must review and approve a written cost estimate for rehabilitation after determining that costs are reasonable.

**(3) Frequency of inspections.** The grantee must conduct an initial property inspection to identify the deficiencies that must be addressed. The grantee must conduct progress and final inspections to determine that work was done in accordance with work write-ups.

### **(c) Acquisition of standard housing.**

**(1)** Existing housing that is acquired with HTF assistance for rental housing, and that was newly constructed or rehabilitated less than 12 months before the date of commitment of HTF funds, must meet the property standards of paragraph (a) or paragraph (b) of this section, as applicable, for new construction and rehabilitation projects.

The grantee must document this compliance based upon a review of approved building plans and Certificates of Occupancy, and an inspection that is conducted no earlier than 90 calendar days before the date of commitment of HTF assistance.

(2) All other existing housing that is acquired with HTF assistance for rental housing must meet the rehabilitation property standards requirements of paragraph (b) of this section. The grantee must document this compliance based upon an inspection that is conducted no earlier than 90 calendar days before the date of commitment of HTF assistance. If the property does not meet these standards, HTF funds cannot be used to acquire the property unless it is rehabilitated to meet the standards of paragraph (b) of this section.

(3) Existing housing that is acquired for homeownership (e.g., ~~downpayment~~ **down payment** assistance) must be decent, safe, sanitary, and in good repair. The grantee must establish standards to determine that the housing is decent, safe, sanitary, and in good repair. At minimum, the standards must provide that the housing meets all applicable State and local standards and code requirements and the housing does not contain the specific deficiencies proscribed by HUD based on the applicable inspectable items and inspected areas in HUD-prescribed physical inspection procedures (Uniform Physical Condition Standards) issued pursuant to 24 CFR 5.705. The grantee must inspect the housing and document this compliance based upon an inspection that is conducted no earlier than 90 calendar days before the date of commitment of HTF assistance. If the housing does not meet these standards, the housing must be rehabilitated to meet the standards of this paragraph (c)(3) or it cannot be assisted with HTF funds.

#### **(d) *Manufactured housing.***

Construction of all manufactured housing (including manufactured housing that replaces an existing substandard unit under the definition of “reconstruction”) must meet the Manufactured Home Construction and Safety Standards codified at 24 CFR part 3280. These standards preempt State and local codes which are not identical to the Federal standards for the new construction of manufactured housing. The grantees providing HTF funds to assist manufactured housing units must comply with applicable State and local laws or codes. In the absence of such laws or codes, the installation must comply with the manufacturer’s written instructions for installation of manufactured housing units.

All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must be on a permanent foundation that meets the requirements for foundation systems as set forth in 24 CFR 203.43f(c)(i). All new manufactured housing (and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction”) must, at the time of project completion, be connected to permanent utility hook-ups and be located on land that is owned by the manufactured housing unit owner or land for which the manufactured housing owner has a lease for a period at least equal to the applicable period of affordability.

In HTF-funded rehabilitation of existing manufactured housing the foundation and anchoring must meet all applicable State and local codes, ordinances, and requirements or in the absence of local or State codes, the Model Manufactured Home Installation Standards at 24 CFR part 3285. Manufactured housing that is rehabilitated using HTF funds must meet the property standards requirements in paragraph (b) of this section, as applicable. The grantee must document this compliance in accordance with inspection procedures that the grantee has established pursuant to § 92.301, as applicable.

#### **(e) *Ongoing property condition standards: Rental housing.***

(1) ***Ongoing property standards.*** The grantee must establish property standards for rental housing (including manufactured housing) that apply throughout the affordability period. The standards must ensure that owners maintain the housing as decent, safe, and sanitary housing in good repair. The grantee’s description of its property standards must be in sufficient detail to establish the basis for a uniform inspection of HTF rental projects. The grantee’s ongoing property standards must address each of the following:

(i) At a minimum, the grantee’s ongoing property standards must include all inspectable items and inspectable areas specified by HUD based on the HUD physical inspection procedures (Uniform Physical Condition Standards (UPCS)) prescribed by HUD pursuant to 24 CFR 5.705.

(ii) **Health and safety.** The grantee's standards must require the housing to be free of all health and safety defects. The standards must identify life-threatening deficiencies that the owner must immediately correct and the time frames for addressing these deficiencies.

(iii) **Lead-based paint.** The grantee's standards must require the housing to meet the lead-based paint requirements in 24 CFR part 35.

(2) **Inspections.** The grantee must undertake ongoing property inspections, in accordance with § 93.404.

(3) **Corrective and remedial actions.** The grantee must have procedures for ensuring that timely corrective and remedial actions are taken by the project owner to address identified deficiencies.

(4) **Inspection procedures.** The grantee must establish written inspection procedures. The procedures must include detailed inspection checklists, description of how and by whom inspections will be carried out, and procedures for training and certifying qualified inspectors. The procedures must also describe how frequently the property will be inspected, consistent with section § 93.404(d).

**(f) Environmental provisions.**

**(1) New construction projects environmental requirements**

(i) **Historic preservation - (A) Standards.** The project activities (including demolition) must not be performed on properties that are either listed in or determined eligible for listing in the National Register of Historic Places, unless the project activities meet the *Secretary of the Interior's Standards for Rehabilitation*, either as certified through the Federal and/or State historic rehabilitation tax credit programs or as verified by someone that meets the relevant *Secretary of the Interior's Professional Qualification Standards*;

(B) **Archaeological resources.** If archaeological resources or human remains are discovered on the project site during construction, the grantee must consult with affected tribes and/or descendant communities and comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-3013), State law and/or local ordinance (e.g., State unmarked burial law).

(ii) **Farmland.** Project activities must not result in the conversion of unique, prime, or statewide or locally significant agricultural properties to urban uses.

(iii) **Airport zones.** Projects are not permitted within the runway protection zones of civilian airports, or the clear zones or accident potential zones of military airfields.

(iv) **Coastal Barrier Resource System.** No **projects** may be assisted in Coastal Barrier Resource System (CBRS) units. CBRS units are mapped and available from the U.S. Fish and Wildlife Service.

(v) **Coastal zone management.** Development must be consistent with the appropriate **State** coastal zone management plan. Plans are available from the local coastal zone management agency.

(vi) **Floodplains.** Except as modified below, definitions for terms used below can be found at 24 CFR part 55.

(A) Construction and other activities in the 100-year floodplain are to be avoided when practicable. If there are no practicable alternatives to new construction or substantial improvement in the 100-year floodplain, the structure must be elevated at least the base flood elevation (BFE) or ~~floodproofed~~ **flood proofed** to one foot above the BFE. Elevated and ~~floodproofed~~ **flood proofed** buildings must adhere to National Flood Insurance Program standards. The primary sources of floodplain data are Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). When FEMA provides interim flood hazard data, such as Advisory Base Flood Elevations (ABFE) or preliminary maps or studies, the latest of these sources ~~shall~~ **must** be used.

(B) No HTF assistance may be approved with respect to:

(1) Any action, other than a functionally dependent use, located in a floodway;

(2) Any new construction critical action located in a coastal high hazard area, 100- or 500-year floodplain;  
or

(3) Any non-critical new construction action in a coastal high hazard area, unless the action is reconstruction following destruction caused by a disaster and is designed for location in a coastal high hazard area consistent with the FEMA National Flood Insurance Program requirements for V-Zones.

**(vii) Wetlands.**

(A) No draining, dredging, channelizing, filling, diking, impounding, or related grading activities are to be performed in wetlands. No activities, structures, or facilities funded under this program are to adversely impact a wetland.

(B) A wetland means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. This definition includes those wetland areas separated from their natural supply of water as a result of activities, such as the construction of structural flood protection methods or solid-fill road beds, or mineral extraction and navigation improvements. This definition is independent of the definition of jurisdictional wetland used by the U. S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.).

**(viii) Explosives and hazards.** Projects must be in compliance with the standards for acceptable separation distance, as set forth at 24 CFR part 51, subpart C.

**(ix) Contamination.** All properties assisted with HTF funds must be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended use of the property.

(A) All proposed multifamily (more than four housing units) HTF projects require a Phase I Environmental Site Assessment (ESA-ASTM). If the Phase I ESA identifies recognized environmental concerns (RECs), a Phase II (ESA-ASTM) will be required. ASTM reports ~~shall~~must be prepared in accordance with the most current ASTM standard. Single family housing does not require a Phase I ESA.

(B) HTF projects must avoid sites located within 0.25 miles of a Superfund or CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) site or other contaminated site reported to Federal, State, or local authorities without a statement in writing from the U.S. Environmental Protection Agency (EPA) or the appropriate State agency that there is no hazard that could affect the health and safety of the occupants or conflict with the intended use of the property.

**(x) Noise.**

(A) Internal noise levels: All activities will be developed to ensure an interior noise level of no more than 45 decibels (dB).

(B) External noise levels:

(1) Project sites exposed to less than or equal to 65 dB of environmental noise are acceptable.

(2) Sites between 65 dB and less than 75 dB are acceptable with mitigation (e.g., noise walls, careful site planning) that result in an interior standard of 45 dB.

(3) Locations with environmental noise levels of 75 dB or greater may not have noise sensitive outdoor uses (e.g., picnic areas, tot lots, balconies, or patios) and require sound attenuation in the building shell to achieve the 45 dB interior standard.

**(xi) Endangered species.** The grantee must avoid all actions which could jeopardize the continued existence of any endangered or threatened species, as designated by the U.S. Fish and Wildlife Service or National Marine Fisheries Service, or would result in the destruction or adversely modify the designated critical habitat of such species.

**(xii) Wild and scenic rivers.** The grantee must avoid activities that are inconsistent with conservation easements, land-use protections, and restrictions adjacent to wild and scenic rivers, as designated/listed by the Departments of Agriculture or Interior. Maps for the National Wild and Scenic Rivers System are available at the governing departments.

**(xiii) Safe drinking water.** Projects with a potable water system must use only lead-free pipes, solder, and flux.

**(xiv) Sole-source aquifers.** Project activities should avoid sites and activities that have the potential to contaminate sole source aquifer areas (SSAs). EPA defines a sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. If the project overlies an SSA, EPA must review the project. EPA review is designed to reduce the risk of ground water contamination that could pose a health hazard to those who use it.

## **(2) Rehabilitation projects environmental requirements.**

### **(i) Historic preservation.**

**(A)** The project activities (including demolition) must not be performed on properties that are either listed in or determined eligible for listing in the National Register of Historic Places, unless the project activities meet the *Secretary of the Interior's Standards for Rehabilitation*, either as certified through the Federal and/or State historic rehabilitation tax credit programs or as verified by someone that meets the relevant *Secretary of the Interior's Professional Qualification Standards*;

**(B) Archaeological resources.** If archaeological resources or human remains are discovered on the project site during construction or rehabilitation, the grantee must consult with affected tribes and/or descendant communities and comply with the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-3013), State law, and/or local ordinance (e.g., State unmarked burial law).

**(ii) Farmland.** Project activities must not result in the conversion of unique, prime, or locally significant agricultural properties to urban uses.

**(iii) Airport zones.** Projects are not permitted within the runway protection zones of civilian airports, or the clear zones or accident potential zones of military airfields.

**(iv) Coastal Barrier Resource System.** No projects may be assisted in Coastal Barrier Resource System (CBRS) units. CBRS units are mapped and available from the U.S. Fish and Wildlife Service.

**(v) Coastal zone management.** Development must be consistent with the appropriate State coastal zone management plan. Plans are available from the local coastal zone management agency.

**(vi) Floodplains.** Except as modified below, definitions for terms used below can be found at 24 CFR part 55.

**(A)** Construction and other activities in the 100-year floodplain are to be avoided when practicable. If there are no practicable alternatives to new construction or substantial improvement in the 100-year floodplain, the structure must be elevated at least to the base flood elevation (BFE) or floodproofed to one foot above the BFE. Elevated and floodproofed buildings must adhere to National Flood Insurance Program standards. The primary sources of floodplain data are Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMS). When FEMA provides interim flood hazard data, such as Advisory Base Flood Elevations (ABFE) or preliminary maps or studies, the latest of these sources **shall** be used.

**(B)** No HTF assistance may be approved with respect to:

**(1)** Any action, other than functionally dependent uses, located in a floodway;



(2) Any critical action located in a coastal high hazard area, 100- or 500-year floodplain; or

(3) Any non-critical action located in a coastal high hazard area, unless the action is designed for location in a coastal high hazard area consistent with the FEMA National Flood Insurance Program requirements for V-Zones. "Any non-critical action in a coastal high hazard area, unless the action is reconstruction following destruction caused by a disaster and is designed for location in a coastal high hazard area consistent with the FEMA National Flood Insurance Program requirements for V-Zones."

**(vii) Wetlands.** No rehabilitation of existing properties that expands the footprint into a wetland is allowed. A wetland means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. This definition includes those wetland areas separated from their natural supply of water as a result of activities such as the construction of structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvements. This definition is independent of the definition of jurisdictional wetland used by the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*).

**(viii) Explosives and hazards.** If the rehabilitation of the building increases the number of dwelling units, then the project must be in compliance with the standards for acceptable separation distance as set forth at 24 CFR part 51, subpart C.

**(ix) Contamination.** All properties assisted with HTF funds must be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended use of the property:

(A) All proposed multifamily (more than four housing units) HTF project activities require a Phase I Environmental Site Assessment (ESA - ASTM). If the Phase I ESA identifies recognized environmental concerns (RECs), a Phase II (ESA-ASTM) will be required. ASTM reports ~~shall~~**must** be prepared in accordance with the most current ASTM standard. Single family housing does not require a Phase I ESA.

(B) HTF projects must avoid sites located within 0.25 miles of a Superfund or CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) site or other contaminated site reported to Federal, State, or local authorities without a statement in writing from EPA or the appropriate State agency that there is no hazard that could affect the health and safety of the occupants or conflict with the intended utilization of the property.

**(x) Noise.**

(A) **Internal noise levels.** All activities will be developed to ensure an interior noise level of no more Than 45 decibels (dB).

(B) [Reserved].

**(xi) Endangered species.**

(A) The grantee must avoid all actions that could jeopardize the continued existence of any species designated by the U.S. Fish and Wildlife Service or National Marine Fisheries Service as endangered or threatened.

(B) The grantee must avoid all actions that adversely modify the critical habitat of such species.

**(xii) Wild and scenic rivers.** The grantee must avoid activities that are inconsistent with conservation easements, land-use protections, and restrictions adjacent to wild and scenic rivers, as designated/listed by the Departments of Agriculture and Interior. Maps for the National Wild and Scenic Rivers System are available at the governing departments.

**(xiii) Safe drinking water.** Projects with a potable water system must use only lead-free pipes, solder, and flux.

**(xiv) Sole-source aquifers.** Project activities should avoid sites and activities that have the potential to contaminate sole source aquifer areas (SSAs). The EPA defines a sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. If the project overlies an SSA, the EPA must review the project. The EPA review is designed to reduce the risk of ground water contamination, which could pose a health hazard to those who use it.

**(3) Acquisition projects environmental requirements.**

**(i) (A)** Existing housing that is acquired with HTF funds, and has been newly constructed or rehabilitated less than 12 months before the commitment of HTF funds must meet the property standards at paragraph (f)(1) of this section.

**(B)** All other existing housing that is acquired with HTF assistance must meet the property standards requirements of paragraph (f)(2) of this section.

**(ii)** If under paragraph (f)(3)(i)(A) or paragraph (B) of this section, the property does not meet these standards, with the exception of the noise standards in paragraph (f)(2) of this section, HTF funds cannot be used to acquire the property.

**(4) Manufactured housing environmental requirements.** Manufactured housing is subject to the environmental standards in paragraph (f)(1) of this section for new construction or paragraph (f)(2) of this section for rehabilitation, as applicable. If an existing property does not meet these standards, HTF funds cannot be used to acquire the property unless it is rehabilitated to meet the standards in paragraph (f)(2), as applicable, with the exception of noise standards in paragraph (f)(2)(x).

## APPENDIX F: CBDG-DR PROPERTY STANDARDS

In addition to the Standards outlined in the DAS, for all projects receiving CDBG-DR funds the following provisions will be applicable as per [84 FR 5844](#).

### B. Housing and Related Floodplain Issues

#### 32. Housing-related eligibility waivers.

**a. Green Building Standard for Replacement and New Construction of Residential Housing.** Grantees must meet the Green Building Standard in this subparagraph for: (i) All new construction of residential buildings and (ii) all replacement of substantially damaged residential buildings. Replacement of residential buildings may include reconstruction (i.e., demolishing and rebuilding a housing unit on the same lot in substantially the same manner) and may include changes to structural elements such as flooring systems, columns, or load bearing interior or exterior walls.

**b. Meaning of Green Building Standard.** For purposes of this notice, the Green Building Standard means the grantee will require that all construction covered by subparagraph a, above, meet an industry-recognized standard that has achieved certification under at least one of the following programs: (i) ENERGY STAR (Certified Homes or Multifamily High-Rise), (ii) Enterprise Green Communities, (iii) LEED (New Construction, Homes, Midrise, Existing Buildings Operations and Maintenance, or Neighborhood Development), (iv) ICC–700 National Green Building Standard, (v) EPA Indoor AirPlus (ENERGY STAR a prerequisite), or (vi) any other equivalent comprehensive green building program acceptable to HUD. Grantees must identify which Green Building Standard will be used in the program policies and procedures.

**c. Standards for rehabilitation of nonsubstantially damaged residential buildings.** For rehabilitation other than that described in subparagraph a, above, grantees must follow the guidelines specified in the HUD CPD Green Building Retrofit Checklist, available at <https://www.hudexchange.info/resource/3684/guidance-on-the-cpdgreen-building-checklist/>. Grantees must apply these guidelines to the extent applicable to the rehabilitation work undertaken, including the use of mold resistant products when replacing surfaces such as drywall. When older or obsolete products are replaced as part of the rehabilitation work, rehabilitation is required to use ENERGY STAR-labeled, WaterSense-labeled, or Federal Energy Management Program (FEMP)-designated products and appliances. For example, if the furnace, air conditioner, windows, and appliances are replaced, the replacements must be ENERGY STAR-labeled or FEMP-designated products; WaterSense-labeled products (e.g., faucets, toilets, showerheads) must be used when water products are replaced. Rehabilitated housing may also implement measures recommended in a Physical Condition Assessment (PCA) or Green Physical Needs Assessment (GPNA).

**d. Implementation of green building standards.**

(i) For construction projects completed, underway, or under contract prior to the date that assistance is approved for the project, the grantee is encouraged to apply the applicable standards to the extent feasible, but the Green Building Standard is not required.

(ii) For specific required equipment or materials for which an ENERGY STAR- or WaterSense-labeled or FEMP-designated product does not exist, the requirement to use such products does not apply.

**e. Elevation standards for new construction, repair of substantial damage, or substantial improvement.** The following elevation standards apply to new construction, repair of substantial damage, or substantial improvement of structures located in an area delineated as a flood hazard area or equivalent in FEMA's data source identified in 24 CFR 55.2(b)(1). All structures, defined at 44 CFR 59.1, designed principally for residential use and located in the 100-year (or 1 percent annual chance) floodplain that receive assistance for new construction, repair of substantial damage, or substantial improvement, as defined at 24 CFR 55.2(b)(10), must be elevated with the lowest floor, including the basement, at least two feet above the base flood elevation. Mixed-use structures with no dwelling

units and no residents below two feet above base flood elevation, must be elevated or floodproofed, in accordance with FEMA ~~floodproofing~~flood proofing standards at 44 CFR 60.3(c)(3)(ii) or successor standard, up to at least two feet above base flood elevation. Please note that grantees should review the UFAS accessibility checklist available at

<https://www.hudexchange.info/resource/796/ufas-accessibilitychecklist/> and the HUD Deeming Notice, 79 FR 29671 (May 23, 2014) to ensure that these structures comply with accessibility requirements.

All Critical Actions, as defined at 24 CFR 55.2(b)(3), within the 500-year (or 0.2 percent annual chance) floodplain must be elevated or ~~floodproofed~~flood proofed (in accordance with the FEMA standards) to the higher of the 500-year floodplain elevation or three feet above the 100-year floodplain elevation. If the 500-year floodplain is unavailable, and the Critical Action is in the 100-year floodplain, then the structure must be elevated or ~~floodproofed~~flood proofed at least three feet above the 100-year floodplain elevation. Critical Actions are defined as an “activity for which even a slight chance of flooding would be too great, because such flooding might result in loss of life, injury to persons or damage to property.” For example, Critical Actions include hospitals, nursing homes, police stations, fire stations and principal utility lines.

Applicable State, local, and tribal codes and standards for floodplain management that exceed these requirements, including elevation, setbacks, and cumulative substantial damage requirements, must be followed.

**f. Broadband infrastructure in housing.** Any substantial rehabilitation, as defined by 24 CFR 5.100, or new construction of a building with more than four rental units must include installation of broadband infrastructure, except where the grantee documents that: (a) The location of the new construction or substantial rehabilitation makes installation of broadband infrastructure infeasible; (b) the cost of installing broadband infrastructure would result in a fundamental alteration in the nature of its program or activity or in an undue financial burden; or (c) the structure of the housing to be substantially rehabilitated makes installation of broadband infrastructure infeasible.

**g. Resilient Home Construction Standard.** Grantees are strongly encouraged to incorporate a Resilient Home Construction Standard, meaning that all construction covered by subparagraph (a) meet an industry-recognized standard such as those set by the FORTIFIED Home™ Gold level for new construction of single-family, detached homes; and FORTIFIED Home™ Silver level for reconstruction of the roof, windows and doors; or FORTIFIED Home™ Bronze level for repair or reconstruction of the roof; or any other equivalent comprehensive resilient or disaster resistant building program. Further, grantees are strongly encouraged to meet the FORTIFIED Home™ Bronze level standard for roof repair or reconstruction, for all construction covered under subparagraph B.32.c.

FORTIFIED Home™ is a risk-reduction program providing construction standards for new homes and retrofit standards for existing homes, which will increase a home's resilience to natural hazards, including high wind, hail, and tropical storms. Insurers can provide discounts for homeowner's insurance for properties certified as FORTIFIED. Grantees should advise property owners to contact their insurance agent for current information on what discounts may be available. More information is also available at:

<https://disastersafety.org/fortified/fortified-home/>.

In addition to the requirements listed above, all project receiving CDBG-DR funds must comply with the HUD Lead Safe Housing Rule outlined in [24 CFR part 35, subparts A, B, J, K, and R](#), as well as the environmental requirements at [24 CFR part 58](#).