# HPD DESIGN GUIDELINES

for NEW CONSTRUCTION

Version 2.02



# Disclaimer

The New York City Department of Housing Preservation and Development (HPD) does not guarantee, warrant, or make representations that the information in this document is complete, accurate, or current. HPD assumes no responsibility for the application of the material or information contained herein nor for any error, omissions, or other discrepancies. Nothing in the document is intended to create nor does it create any enforceable rights, remedies, entitlements, or obligations. HPD reserves the right to change or suspend any or all parts of this document without notice. The designer of record is responsible to ensure a project is designed in a manner to comply with the applicable laws, regulations, codes, and design standards including, but not limited to, those related to non-discrimination.

The illustrations included within the *HPD Design Guidelines for New Construction* are intended merely to assist in navigating the various requirements and design standards; to aid staff during the plan review for projects participating in HPD programs and activities; and to add clarity and transparency to designers responding to HPD's Design Review comments. This document is not meant to offer a design template, but rather to document and illustrate some of the design controls and potential outcomes.

# Preface

This document is issued by the New York City Department of Housing Preservation and Development (HPD), also referred to in this document as "the Agency" and was developed within the HPD Office of Development's Division of Building and Land Development Services (BLDS). This document, the HPD Design Guidelines for New Construction ("the Guidelines") supersedes both the HPD Design Guidelines for New Construction and Senior Housing issued May 2016 and the HPD Design Guidelines for Supportive Housing issued February 2012.

This update not only consolidates previous guidelines, it also describes HPD BLDS procedures, reflects HPD Program requirements, and clarifies elements of the prior guidelines. Unlike previous guidelines, this document is an incremental update designed to keep current with practice and external requirements.

# **Special Thanks**

This update to the *HPD Design Guidelines for New Construction* is the product of internal evaluations and community feedback and would not have been possible without the help of numerous individuals and organizations. In particular, HPD would like to thank the New York State Association for Affordable Housing (NYSAFAH), the Supportive Housing Network of New York (SHNNY), Kinetic Communities Consulting, Taitem Engineering, Steven Winter Associates, Ettinger Engineering, the Citizens Housing and Planning Council (CHPC), the New York City Housing Development Corporation (HDC), the American Institute of Architects (AIA) New York Chapter, and our key sister city agencies including the Mayor's Office of Climate and Environmental Justice (MOCEJ) and the Office of Management and Budget's Climate Programs and Policy Team (OMB) for their contributions to this document and previous versions upon which it is based. Any errors or omissions are the sole responsibility of HPD.

# **Table of Contents**

SECTION 1 / Introduction SECTION 2 / Intention of the Design Guidelines SECTION 3 / BLDS Design Consultation & Review	4 4 6	CHAPTER 1  INTRODUCTION
SECTION 1 / Core Sustainability Standards SECTION 2 / Resiliency SECTION 3 / Heating, Ventilation, and Air Conditioning SECTION 4 / Energy Efficiency and Envelope SECTION 5 / Health and Wellness SECTION 5 / Health and Wellness SECTION 6 / Accessibility and Age-Friendly Design SECTION 7 / Broadband SECTION 8 / Building Operations SECTION 9 / Commercial & Retail Spaces	11 12 16 23 25 27 29 31 31	CHAPTER 2 GENERAL REQUIREMENTS
SECTION 1 / Site Planning SECTION 2 / Building Exterior SECTION 3 / Outdoor Spaces SECTION 4 / Building Planning SECTION 5 / Apartment Planning	33 33 34 35 39	CHAPTER 3 DESIGN REQUIREMENTS
SECTION 1 / Homeownership SECTION 2 / 1-3 Family Homes SECTION 3 / Supportive Housing SECTION 4 / Senior Housing SECTION 5 / Inclusionary Housing Program Requirements SECTION 6 / Inclusionary Housing Design Requirements	62 62 63 64 66 67	CHAPTER 4 PROGRAM REQUIREMENTS

# **SECTION 1 / INTRODUCTION**

The New York City Department of Housing Preservation and Development (HPD) Office of Development's Division of Building and Land Development Services (BLDS) has issued the *HPD Design Guidelines for New Construction* for HPD-assisted multifamily new construction, supportive, and senior housing projects, and they may also be used to guide the design of 1-3 family homes. Projects participating in the Inclusionary Housing incentive programs (either MIH or VIH) that are not subsidized through any HPD Loan Programs shall not be subject to the *Guidelines*, but are subject to HPD review of zoning and accessibility requirements. Projects receiving 421-a tax credits only are not subject to HPD Design Review. Design Review to ensure compliance with the requirements of the *Guidelines* is a prerequisite to loan closing for any new construction projects developed under applicable HPD loan programs.

HPD seeks to support projects that meet several core principles. Projects should: have a strong relation to the neighborhood (urban design and building planning), meet the needs of households and individuals (apartment planning and accessible design), promote greater equitability and health outcomes, encourage active design, utilize sustainable or renewable products and promote energy efficiency, and select sustainable features that can potentially reduce operating costs.

# **SECTION 2 / INTENTION OF THE DESIGN GUIDELINES**

The *HPD Design Guidelines for New Construction* establishes the design criteria by which BLDS and others in HPD will evaluate proposed developments upon application to HPD for financial assistance. The Guidelines represent an effort to meet housing demand, respond to market changes, and contain costs, and are intended to apply to HPD-assisted housing developments across a variety of conditions.

The Guidelines are a policy document intended to establish a minimum design standard that may exceed what would otherwise be required. Pertinent laws, rules, regulations, and codes take precedence over the Guidelines in event of a conflict. Furthermore, HPD recognizes that the Guidelines cannot address all development scenarios. When unique or special circumstances, extraordinary market conditions, or special community characteristics necessitate deviation from any aspect of the Guidelines, the development team must consult with the applicable loan program and notify BLDS, in writing, in advance of the first design submission. Submissions must identify known areas of non-compliance and explain project constraints and the rationale behind design decisions. The following chapters address a specific set of goals or standards that HPD has established as a baseline for projects to meet. These are referred to as Requirements. Each section also contains "Reach" criteria which all development teams are encouraged to meet, as they represent best practices and set a precedent for future baseline standards. Note that certain Requirements may be waived by HPD if they are demonstrated to be infeasible.

2.1 **Requirement vs. Reach** At a minimum, all projects must comply with the requirements for their project type or Program. However, projects are encouraged to explore the feasibility of the "Reach" goals, as they set a precedent for future Requirements:

**Requirements** are mandatory for all projects. In some cases, there are different requirements for different Programs or unique populations.

**Reach** criteria are optional but represent best practices for the specific criteria area. These criteria may become mandatory in the future. Projects may choose individual Reach criteria or follow a Reach Third-Party Certification, which covers many criteria.

2.2 **Design Waivers** Certain deviations from the baseline requirements will be considered via a Design Waiver Request if necessary to avoid costly structural changes or tenant hardship or if they result in a superior design solution. Evaluations of waiver requests will include the determinations of the appropriateness of the proposed alternative(s). Waiver requests will be reviewed on a case-by-case basis and determinations will be based on the degree of:

- technical infeasibility
- financial infeasibility including cost-effectiveness, availability of incentives, impacts on operating costs, or if criteria would cause project to be reclassified (e.g. a Mod Rehab to a Sub Rehab where project cannot support the additional costs)
- impact on the residents, including whether it would result in higher tenant-borne utility costs or would require tenant relocation during construction that is not otherwise required
- inability of the system to comply with HPD's Electric Heating Policies

All waiver requests must be submitted via the Design Waiver Request Form for review and determination by HPD **prior to Design Consultation**.

orange bubble, it will signify that a Design Waiver is available! Design Waivers must be approved by HPD prior to Design Consultation.

# **SECTION 3 / BLDS DESIGN CONSULTATION & REVIEW**

All drawings and documents submitted to BLDS by the development team must be submitted digitally through eBLDS, which is the system for storing, coordinating, and transferring these documents. eBLDS is a suite of tools comprising an internal user interface, database (Sharepoint), email (Outlook), and third-party file transfer system. Internal digital reviews are conducted using Bluebeam Revu software. An eBLDS 'gatekeeper' within BLDS monitors the system and submissions.

All project intakes for BLDS Design Consultation and BLDS Design Review are initiated through HPD Program. The eBLDS system automatically sends messages when the project status changes; statuses include 'Awaiting Electronic Submission', 'Pending Review', 'In Review', 'Awaiting Resubmission', and 'Design Acceptance', among others. The system correspondence outlines next steps for the development team, including submission requirements.

The first phase of design review for all HPD-funded projects is the Design Consultation, a virtual meeting between HPD Program, BLDS, and members of the development team (including but not limited to the architect, owner, and sponsor). Projects submitting for Design Consultation should have sufficiently resolved designs (well into the design development phase) that have been coordinated among trades (architectural, MEP, structural, etc.) as necessary. In advance of submission, the development team must also coordinate the Dwelling Unit count and distribution with HPD Program to ensure compliance with Term Sheets. The Design Consultation will not be scheduled until all materials have been received by HPD and the project moved to 'Pending' status. Upon receiving a complete design submission, BLDS will begin to review the submitted materials and schedule a date for the Design Consultation with the development team through the HPD Program project manager. HPD will send an invitation to the virtual meeting.

At the Design Consultation, HPD will present its findings on matters relating to the design and planning of the proposed development; including compliance with the HPD Design Guidelines for New Construction, HPD sustainability and resiliency goals, opportunities for cost containment, and program requirements. Design Consultations also provide guidance to the development team regarding applicable laws, rules, codes, and regulations, including the New York City Building Code, New York City Zoning Resolution, New York City Housing Maintenance Code, New York State Multiple Dwelling Law, the Fair Housing Act, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. The Design Consultation is both an initial design review and an opportunity for the various entities involved in an affordable housing development project to ensure that the priorities of the project align with the goals of all involved.

BLDS will issue a Summary of comments outlining topics for coordination between the development team and HPD Program and specifying necessary revisions to achieve Design Acceptance.

Refer to BLDS' website for all resources, checklists, and additional information.

eBLDS

Projects participating n an Inclusionary Housing program but not otherwise funded or assisted by HPD are not required to participate in the Design Consultation process After the Design Consultation, the project will be identified for one of three review tracks: Full Design Review, Targeted Design Review, or Expedited Design Review.

#### FULL DESIGN REVIEW

Projects identified for Full Design Review will receive a new project intake through eBLDS for BLDS Design Review. After receipt of a complete design review package, BLDS will review the material and provide comments similar in scope and form to the feedback from a Design Consultation. Once the review is completed, it will be returned to the development team through eBLDS, and must then be resubmitted for BLDS Design Review until it receives a Design Acceptance.

Projects selected for Full Design Review are expected to achieve 'Design Acceptance' by the third review. If a project exceeds three rounds, BLDS and/or HPD Program may call a meeting to resolve outstanding issues. In some cases, such meetings may occur earlier in the process to resolve persistent or complex issues in a project identified during the Design Review process.

#### TARGETED DESIGN REVIEW

At the discretion of HPD/BLDS, a Targeted Design Review track may be available for projects whose design teams include a specialized accessibility consultant. In a Targeted Review, BLDS will provide comments relating to compliance with the HPD Design Guidelines for New Construction, but BLDS will not provide additional feedback related to accessibility after the Design Consultation. In such cases, the development team will be expected to comply with the comments outlined in the Design Consultation Memo, and the development team retains responsibility to ensure that the buildings' design and construction comply with all laws, rules, regulations, and codes mandated by city, state, and federal authorities having jurisdiction. Projects selected for a Targeted Design Review will remain eligible for a Full Design Review upon request by the development team.

#### **EXPEDITED DESIGN REVIEW**

Upon completion of Design Consultation, some projects may be selected for an Expedited Design Review if the required design changes are sufficiently minimal. Projects selected for an Expedited Design Review will remain eligible for a Full Design Review upon request by the development team.

Threshold: In order to be considered for Expedited Design Review, a project must meet the following criteria:

- a. Only projects on privately-owned sites will be eligible for Expedited Design Review.
- b. Only projects whose architects have received BLDS Design Acceptance for a New Construction project in the previous three years will be eligible for Expedited Design Review.

all projects, including those only participatin in an Inclusionary Housing program, must submit a record set for review **DESIGN REVIEW** 

Competitive: Projects meeting certain criteria will be more likely to qualify for Expedited Design Review, including projects that:

- a. conform to term sheet requirements for unit mix
- b. have an Accessibility Consultant as part of the design team
- have a developer who has closed on an HPD New Construction project in the previous five years

POST-ACCEPTANCE AMENDMENT (PAA) REVIEW

Any projects, except those in Expedited Design Review track, whose unit designs change substantially after receiving HPB BLDS Design Acceptance (and before project closing) must initiate and submit a design submission for a BLDS PAA Review, clearly indicating the scope of changes visually and verbally, and describing the reasons for the changes. Full submission requirements are outlined in the BLDS PAA Submission Checklist.

ENVIRONMENTAL REVIEW

Environmental Review is a policy-mandated process that requires governmental agencies undertaking discretionary actions and approvals (such as construction financing, ULURP approvals, or Article XI tax exemptions from City Council) to consider the impacts to the environment that those actions may have, and to disclose those impacts to the public. Most projects HPD finances involve discretionary actions, the notable exceptions being projects solely funded through 421-a or Inclusionary Housing-only projects. BLDS Environmental Planning Unit manages the review process for most HPD-funded projects, securing compliance with a wide array of local, state, and federal environmental regulations. BLDS Environmental Review process has to integrate many different regulatory frameworks, so the level and complexity of Environmental Review can vary dramatically based on the specific nature of the project being financed.

**SUBMISSION** REQUIREMENTES

A list of submission requirements will be sent to the development team from the automated system after the project has been initiated. Submissions must include all materials from the checklist, submitted in a PDF not to exceed 50 megabytes (MB). Incomplete submissions will be returned without review and must be resubmitted.

TIMELINE

Design Consultation submissions should be received by HPD approximately 9 months ahead of the project's anticipated closing (plus or minus 2 months). Design submissions for design review should be submitted after the Design Consultation and not before all comments from the Design Consultation have been satisfactorily addressed.

# **BLDS REVIEW TIMELINE**

Submission Milestones Prior to Closing



\* These bars represent the range of time during which a review may be submitted and a review conducted. Project review is not intended to fill the entire range from beginning to end.

\*\* Note that if Environmental Assessment reveals adverse findings, the Environmental Review process will require 1 year minimum to complete.

Notes:

 The goal is to achieve BLDS Design Acceptance at least one month ahead of anticipated closing.
 BLDS recommends submission to DOB after Design Consultation comments have been issued and addressed. However, the development team remains responsible for securing DOB approval independent of the HPD process.

# GENERAL REQUIREMENTS

CHAPTER 2

# **SECTION 1 / CORE SUSTAINABILITY STANDARDS**

In Mayor Adams' Housing our Neighbors: A Blueprint for Housing and Homelessness, HPD committed to fast-tracking equitable decarbonization and releasing Design Guidelines that will ensure these goals can be met across our portfolio. HPD was also one of 35 city agencies and offices to help develop PlaNYC: Getting Sustainability Done, New York City's long-term strategic climate plan that highlights efforts the city is taking to protect New Yorkers from climate threats, improve quality of life, and build the green economy. The Guidelines ensure that HPD's new construction meets these ambitious goals and are poised to meet future requirements, including Local Law 154 of 2021, which mandates all electric new construction.

## **1.1 PERFORMANCE STANDARDS**

- a. All projects must certify with the current version of the NYC Overlay of Enterprise Green Communities (EGC) or LEED v4 Gold or above.
- b. Design building to meet Local Law 97's 2050 GHG emissions limits in 2050, assuming a 100% clean electric grid. Note that fossil-fuel usage from emergency backup power generation should be excluded from calculation\*
- a. Certify project to one of the following high performance building standards:
  - Enterprise Green Communities Plus, or
  - PHIUS or PHI. Note that all PHIUS/PHI projects must also certify with Enterprise Green Communities or LEED Gold or above. Note that PHIUS certification requires compliance with Energy Star and DOE Zero Energy Ready Home (ZERH).

## **1.2 ELECTRIFICATION**

- a. All projects must utilize high-performance all-electric heating/cooling and domestic hot water equipment meeting the performance standards outlined in this document.
- b. All appliances such as dryers and cooktops, ovens or ranges must meet the performance standards outlined in this document.
- a. Building is all-electric and designed to reduce electricity use by meeting one of the reach certifications (EGC Plus, PHIUS or PHI). Note that use of on-site emergency back-up power generation with fossil fuel is acceptable; high-efficiency fossil fuel generators are permitted. Generators may only be used in no load tests/exercise and for emergency purposes when the electric grid power fails.
- b. Utilize induction cooking in lieu of electric resistance cooktops.

System-based waivers may be available at the sole discretion of HPD if project can demonstrate that electrification of a system or an appliance is technically or financially infeasible and building cannot meet 2050 GHG emissions limits as a result.

REQUIREMENTS

REACH

REQUIREMENTS

REACH

The Inflation Reduction Act (IRA) provides up to \$1,000/ DU for projects that certify with ENERGY STAR and up to \$2,500 per dwelling unit for projects that certify w/ D0E's Zero Energy Ready Homes program (ZERH). All projects ard strongly encouraged to seek these incentives. ENERGY STAR is required by EGC, and ZERH is one path to achieve Enterprise Green Communities

Note that highefficiency fossil fuel generators are permitted as of right

System-based waivers may be available at the sole discretion of HPD if project can demonstrate that electrification of a system or an appliance is technically or financially infeasible. If waived, system should be designed to be "Electric Ready" per the guidance in Appendix B to the extent that the utility can provide service.

# **SECTION 2 / RESILIENCY**

PlaNYC committed NYC to protect New Yorkers from higher temperatures, extreme rainfall and coastal flooding, including implementing a multi-layered strategy for flood resiliency and maximizing access to indoor cooling. HPD's Design Guidelines support these efforts to protect residents in affordable housing and will also ensure buildings are poised to meet Local Law 41 of 2021, which will require that City-financed housing aligns with NYC's Climate Resiliency Design Guidelines.

As required by State law, New York City is a Participating Community in the National Flood Insurance Program (NFIP), as administered by the Federal Emergency Management Agency (FEMA). In New York City, the Department of Buildings is the flood plain administrator and regulates building design and construction in accordance with the NFIP and FEMA requirements. Appendix G of the New York City Building Code sets forth the comprehensive regulations for flood plain management including the technical standards for compliance.

In addition, HPD-assisted projects that are defined as "flood-prone" below must meet the requirements in Sections 2.1 and 2.2, and comply with all other baseline requirements as applicable. The following sites are considered "flood-prone" for the purposes of the Guidelines:

- Sites defined as being within the Special Flood Hazard Area, comprised of the 2007 effective Flood Insurance Rate Map (FIRM) and 2015 Preliminary Flood Insurance Rate Map (PFIRM), whichever is more restrictive (includes both the 1% and 0.2% annual chance floodplain).
- Sites located within the 2080s 1% annual chance coastal floodplain per NYC's Flood Hazard Mapper.
- Sites (or parts of sites) that are shown as adjacent to flooded areas in the extreme stormwater flooding (100-year storm with 2080s SLR) scenario in the NYC Stormwater Flood Map (see Section 2.2 Stormwater Management).

#### 2.1 FLOOD-RESISTANT CONSTRUCTION

Sites defined as being within the Special Flood Hazard Area and/or the 2080s 1% annual chance coastal floodplain per NYC's Flood Hazard Mapper must meet the following requirements.

- a. Elevate all residential units, critical equipment, and at least one point of egress for each required egress pathway above the 2080s SLR-adjusted Design Flood Elevation (SLRadjusted DFE), as established by the New York City Climate Resiliency Design Guidelines (CRDG) in Chapter II, Section C. Sea Level Rise.
- b. Dry flood-proof critical equipment that cannot be elevated, ensuring that the top of permanent flood barriers are above 2080s SLR-adjusted DFE levels. Design foundation, basement and ground floor structural elements for anticipated flood load. Dry floodproofing as an alternative to elevation of critical equipment requires a Design Waiver.

#### "Critical equipment includes any mechanical, electrica and other life safety equipment, systems and controls critical to building function

- HVAC systems
- Boilers, furnaces, a water heaters
- Fuel storage tanks
- Fire-suppression sprinkler controls
- Flevator machine
- rooms
- Electrical panels and
- Backup generators, and other emergency
- backup systems - Alarm controls and
- components
- Energy man
- Systems
- relecommunications
- Electric and
- Electric al
- Utility chu
- switches
- Switches

NYC's Flood Hazard Mapper utilizes the high-end 90th percentile projections prepared by the New York City Panel on Climate Change (NPCC) to identify future projected 1% annual chance floodplains.

REQUIREMENTS

- c. Use flood-resistant construction materials for all construction below the DFE that is susceptible to flooding. More information can be found here.
- d. Install backwater valves with containment tanks and ejector pumps in the lowest level of the building, and wire system to backup power system or emergency panel.
- e. Provide permanent signage in buildings and flood disclosure information on tenant leases notifying tenants of potential flood risk, including whether the unit is located wholly or partially in a Federal Emergency Management Agency-designated 100year and 500-year floodplains, per FEMA Flood Insurance Rate Maps, and providing resources to residents about emergency preparedness, encouraging them to subscribe to NotifyNYC and to seek a National Flood Insurance Program renters' flood insurance policy to cover personal property and contents damaged by a flood.
- f. Limit paved surfaces to where they are required for programmatic site elements in favor of vegetated surfaces and/or vegetated stormwater retention systems (e.g., bio-swales, green roofs, stormwater planters, grass filter strips). Where paved surfaces are required, use open-grid or permeable systems to the maximum extent possible. Maintenance protocol should be in place to ensure ongoing permeability.
- g. Procure flood insurance.
- Provide additional flood mitigation features on the site where applicable, including deployable flood barriers or natural systems-based approaches (e.g., living shorelines, restored wetlands, landscape berms).
- b. All paving or hardscaping to be open-grid or permeable pavement with drainage underlayment, and be maintained to ensure ongoing permeability.
- c. Additional measures can be found in Table 4 of the Climate Resiliency Design Guidelines.

## **2.2 STORMWATER MANAGEMENT**

- a. Sites (or parts of sites) that are shown as adjacent to flooded areas in the extreme stormwater flooding (100-year storm with 2080s SLR) scenario in the NYC Stormwater Flood Map must meet the following requirements:
  - Elevate all residential units, critical equipment, and at least one point of egress for each required egress pathway above grade.
  - Install backwater valves with containment tanks and ejector pumps in the lowest level of the building, and wire system to backup power system or emergency panel.
  - Procure flood insurance.

# REQUIREMENTS FOR FLOOD-PRONE PROJECTS

REACH

REQUIREMENTS

Design Waivers may be available for Sections 2.1 and 2.2 if it can be demonstrated that meeting elevation requirements would result in a loss of residential units or would be otherwise infeasible. In such cases, determination is made by HPD and alternative mitigation is required. More information on waiver applicability is available in the New Construction Design Guidelines Workbook.

Refer to NYC's Climate Resiliency Design Guidelines for additional information and strategies to address flooding. As of publication the CRDG Version 4.1 published in May 2022 is the more recent version and should be consulted until superseded.

Design Waivers may be available for Sections 2.1 and 2.2 if it can be demonstrated that meeting elevation requirements would result in a loss of residential units or would be otherwise infeasible. In such cases, determination is made by HPD and alternative mitigation is required. More information on waiver applicability is available in the New Construction Design Guidelines Workbook. Refer to NYC's Climate Resiliency Design Guidelines and the DEP's Stormwater Management webpage for additional information and strategies to address stormwater. REQUIREMENTS

REACH

By the 2000s, the number of days at or above 90°F is expected to double, and the frequency of heat waves will triple to an average of six heat waves annually.

REQUIREMENTS

- b. All projects must comply with DEP's Unified Stormwater Rules (USWR), which require Stormwater Construction Permits for projects that disturb 20,000 sf or more of soil or create 5,000 sf or more new impervious surface, where applicable.
- Limit paved surfaces to where they are required for programmatic site elements in favor of vegetated surfaces and/or vegetated stormwater retention systems (e.g. bio-swales, green roofs, stormwater planters, grass filter strips). Where paved surfaces are required, use open-grid or permeable systems to the maximum extent possible.
- Satisfy at least 50% of the site's irrigation by water use from rainfall capture or greywater recycling/reuse.
- b. All projects not subject to the USWR, especially those in flood-prone areas, are strongly encouraged to follow DEP's retention-first approach with a priority on vegetated systems. See figures 4.2 and 4.3 in DEP's USWR Stormwater Manual for guidance on best practices.

# **2.3 EXTREME HEAT**

- a. All HPD-assisted projects must be designed and constructed to provide ENERGY STAR rated or equivalent cooling to all residents in all habitable rooms in all buildings. Refer to section 3.2 for additional info.
- b. Senior Housing and buildings with low-mobility populations in 50% of units, which are located in high-heat risk areas (with Heat Vulnerability Index of 4 or 5) and are not located within a 0.25-mile walk distance of dedicated, accessible public open space, must provide permanent open space for use by all residents. The space must be at least 80% unpaved except where necessary for programmatic uses, should provide shade to at least 75% of the area, and include seating. Shade trees or solar canopies are strongly encouraged to meet this requirement while providing multiple benefits. Non-vegetated, non-solar structural shading devices shall have an initial SR of at least 0.33 as measured in accordance with ANSI/CRRC S100. Shade should be calculated for 12 pm on June 21st and assume reasonable tree growth where trees are being proposed. Open space may be located anywhere on the site, including grade or roof areas.
- c. Over at least 50% of the site's hardscaped areas must use: light-colored, high-albedo materials with an initial minimum solar reflectance of 0.33, or
   an open-grid pavement system.

- a. Provide permanent, shaded outdoor space for use by all residents in every building.
- b. Minimize hardscaping and provide vegetated surfaces and/or shading (vegetated, solar canopy, or shading devices having an initial SR of at least 0.33) over at least 50% of non-roof areas.
- c. In high heat areas, especially for south and west-facing walls, use exterior wall finishes that are light in color and/or exhibit an initial solar reflectance of at least 0.60 and exhibit an initial thermal emittance of at least 0.75. Vegetated walls would also be acceptable.
- d. Provide shading on all south and west-facing windows to mitigate solar heat gain during summer months. This can include appropriately designed exterior shading including louvers, awnings, or deep recesses as well as appropriate interior shades (e.g., with reflective backing) where exterior shading is not feasible or practical.

## 2.4 BACKUP POWER AND PASSIVE SURVIVABILITY

- a. Senior housing must provide the following:
  - Adequate backup power generation-in addition to service for critical/emergency loads-to ensure that at least one elevator remains functional during an emergency and
  - A community space (or spaces) that can serve as a "Place of Refuge" equal to 15 SF per bedroom that is accessible to all residents that includes backup power for heating, cooling, lighting, outlets, WiFi, at least one refrigerator for every 50 bedrooms (or approximately 0.5 cubic feet per bedroom), and at least one accessible bathroom with a potable water source. Ensure that the space has natural ventilation and lighting.
- b. Where backup power is not otherwise required, provide a dedicated emergency panel that can be safely and easily connected to an efficient generator, mobile generator or island-able solar system to power critical/ emergency loads. Prioritize emergency systems such as egress lighting, life safety systems, small critical heating and cooling loads, domestic water pumps to provide potable water, sewage ejector pumps, WiFi, and convenience power for occupants (charging stations).
- a. Where otherwise not required, provide a "Place of Refuge" (as defined above) that is tied to an efficient generator or dedicated emergency panel.
- b. Design buildings to maximize the residents' ability to "shelter in place" by providing highly efficient building envelopes, natural ventilation, and natural light.

#### Refer to NYC's Climate Resiliency Design Guidelines for additional information and strategies to <u>address</u> extreme heat

REACH

Projects may use an efficient generator or on-site battery storage, possibly paired with a solar energy system

0-bedrooms and Efficiency units should count as 1 bedroom

REACH

REQUIREMENTS

# SECTION 3 / HEATING, VENTILATION, AND AIR CONDITIONING

Highly efficient HVAC systems contribute to the comfort and safety of residents while reducing energy use and putting buildings on a path to meet NYC's ambitious climate goals and laws, including Local Laws 97 and 154. This includes focusing on building electrification —electrifying heating and hot water with high-performance heat pumps for heating and cooling as well as ventilation to increase occupant and building health. Note that electric heating and hot water systems must comply with HPD's Electric Heating Policy which ensures that efficient systems are encouraged, poorly performing systems are not allowed, and tenants are protected. HPD's Resident-Paid Heat Policy outlines the very restrictive conditions under which heating may be paid for by building residents.

#### **3.1 HEATING SYSTEMS**

- a. All primary HVAC equipment must be all high-efficiency, all-electric, and carry an ENERGY STAR certification or provide the equivalent in energy savings, quality and operational costs. Heating Equipment shall be either cold climate air source or ground source heat pumps. Acceptable equipment includes\*:
  - Cold Climate Variable Refrigerant Flow (VRF) without Heat Recovery (2-pipe system) with distinct zones for climate variations (E.G. North zone and South zone)
  - Cold Climate Variable Refrigerant Flow (VRF) with Heat Recovery (3-pipe system)
  - Residential/Light Commercial Air Source Heat Pumps
  - Ground Source Heat Pumps (GSHP)
- b. Heat Pump equipment must meet the following conditions:
  - VRF Multi-Split must meet NEEP's cold climate COP requirements @47°F, 17°F and 5°F based on outdoor unit capacity or equivalent, and must be certified by AHRI Standard 1230
  - Packaged Terminal Heat Pump (PTHP) & Single Package Vertical Heat Pump (SPVHP) must have a compressor with variable capacity (three or more distinct operating speeds or continuously variable), have a COP @5°F ≥ 1.5 (at maximum capacity operation), be certified by AHRI Standard 310/380 .
  - Electric Resistance backup is not permitted, including when used as 'auxiliary' and integrated within the PTHPs.
  - Boiler/tower water loop heat pumps are not permitted.
  - Central Equipment must be BAC-net capable to allow remote monitoring capability of the temperature set-points.

Refer to HDC's new

Note that tenantpaid electric hot water must meet the requirements of HPD's Electric Heating Policy REQUIREMENTS

- VRF systems that do not include Heat Recovery shall be zoned appropriately to ensure that all spaces on the same system have similar daily load profiles for heating and cooling. Design of zones shall include analysis of unbalanced solar heat gains and internal heat gains considering exposure and potential occupant load to minimize instances where zone would require simultaneous heating and cooling.
- Electric resistance space heating may be used with HPD pre-approval in spaces such as common stairwells, utility rooms, basements, vestibules, and other spaces where heat pumps may not be appropriate. Total heating capacity is limited to 3.5 kW per enclosed space. Heaters located in bathrooms must have timer controls; all other heaters must have automatic controls (maximum time 30 minutes); and set at 50 degrees maximum. Electric resistance space heating is not allowed in garages or plenums or for ice melting. Electric resistance heat IS allowed in high volume situations such as laundry make-up air (but not for ventilation air).
- c. Heating systems shall meet the following design considerations as applicable:
  - Projects must comply with HPD's Electric Heating Policy.
  - For projects considering tenant/ resident-paid heating, projects must receive prior permission from HPD Program and HPD Sustainability Office and must comply with the requirements of HPD's Resident-Paid Heating Requirements – including adjusting the M&O and rent to account for shifting costs – using the appropriate utility allowance.

Split System Heat Pumps must be installed per HPD's Space Heating Heat Pump Technical requirements: Split Systems

Room Heat Pumps (PTHPs) must be installed per HPD's Space Heating Heat Pump Technical Requirements: Cold Climate Room Heat Pumps

- All loads must be calculated according to ACCA Manual J 8th Edition or according to the Residential Cooling and Heating Load Calculations chapter of ASHRAE Handbook of Fundamentals and ANSI/ASHRAE Standard 183-2007.
- All equipment must be sized according to ACCA Manual S.
- Exterior units shall be screened from horizontal view or located so they are not visible from dwelling units, common spaces, or sidewalks.
- Refrigerant leaks can greatly affect system efficiency and comfort, as well as posing significant harm to the environment. Projects must meet the Refrigerant Charging and Leak Prevention Requirements.

# REQUIREMENTS

Waivers may be available at the sole driscretion of HPD if project can demonstrate that the requirement is technically or financially infeasible and is not otherwise required by codes and laws.

- a. Use higher-than-minimum equipment efficiencies or utilize ground source heat pumps.
- b. Use low-GWP refrigerants to the extent possible, and/or water-based distribution systems in lieu of refrigerant-based systems.
- For central equipment with BACnet capability, provide means to control in-unit set points.
- d. meet reach criteria for building performance to reduce heating and cooling load.

#### **3.2 COOLING SYSTEMS**

- a. All HPD-assisted projects must be designed and constructed to provide energy-efficient air conditioning to all residents in all habitable rooms in all buildings.
  - This requirement can be satisfied by systems that provide both heating and cooling, and this type of system is preferred for HPD-assisted projects.
- b. If standalone air conditioning units are proposed in lieu of heat pumps for cooling:
  - Owner must provide and install one air conditioning unit, as specified below, in every habitable room in all dwelling units.
  - All air conditioning units must be ENERGY STAR certified.
  - Any air conditioning units installed in a through-wall sleeve must be designed to be used in such an application.
  - All through-wall air conditioning units must be installed through an insulated, well-fit panel that is fully air-sealed at the opening and structurally supported as necessary. If through-wall or window air conditioning units remain installed yearround, owners must provide insulated covers for all air conditioning units and store them seasonally if requested by tenant.
  - For project proposing window units, windows must be sized for natural light and ventilation as if one window unit in each room is permanent (e.g. that portion of window designed to hold air-conditioning equipment may not contribute to light and air calculations).
- c. Air conditioning controls must be fully accessible: either (1) air conditioning units or permanent unit controls must be located within required accessible reach ranges in all units; or (2) the air conditioning unit must include a remote control and an accessible wall switch.

REACH

- a. Provide exterior or interior window shading devices to reduce solar heat gain.
- b. Provide ceiling fans in dwelling units and common areas, provided that the lowest part of the fan remains at least 7'-6" above the finished floor and only where resident and guest safety can be assured. Ceiling fans must be coordinated with NFP requirements.

#### **3.3 VENTILATION**

- a. Window screens must be provided and installed on at least one operable sash in each habitable room in every dwelling unit. Window screens must be designed and installed to facilitate window cleaning.
- b. Verify that in-unit ventilation system ductwork is installed to achieve design flow rates, and that installed flow rates are within +/- 15 CFM or +/- 15% of design value, as mandated through the EGC and ENERGY STAR Multifamily New Construction program.
- c. Projects designing to Passive House performance levels must include Energy Recovery Ventilation in all spaces regardless of whether they plan to certify.
- d. If the system includes Constant Air Regulators (CAR) at exhaust registers for vertical exhaust systems, provide access for servicing or repairs of CAR and Fire Damper devices.
- e. Operation and Maintenance (0&M) training materials for the ventilation system must be provided to building staff and residents. Specify an appropriate maintenance regimen for building owners, facility managers, and superintendents for both normal and enhanced operations, and reflecting manufacturer's recommendations for regular equipment upkeep (e.g. the replacement schedule of filters, checking condensation lines, etc.).
- a. Provide screens on all operable windows. Screens outside windows may help to satisfy code-mandated bird safety glazing requirements.
- b. In common areas, provide operable windows and replace factory-installed window limiters for alternative window guard devices to maximize airflow while maintaining safety and security.
- c. Install balanced ventilation with fresh air and MERV-13 (or higher) filters to provide filtered fresh air to all dwelling units. Prioritize the following buildings:
  - Buildings in NYC neighborhoods where the estimated annual rate of asthma emergency department visits related to PM2.5 for children under 18 is more than 150 per 100,000 children. See the NYC's Environment and Health Data Portal to identify the five NYC neighborhoods in the Bronx and Harlem meeting these conditions.

- Buildings within 500' of a heavily trafficked roadway
- Buildings located in areas with high ambient noise levels, which typically include those near highly trafficked thoroughfares, airports, heliports, train facilities, or other loud activities
- Ventilation systems should include a high-speed or "boost" setting. Confirm ductwork has been sized to have additional capacity in order to minimize friction & noise and is properly sealed.
- e. Incorporate additional fresh air into mechanical systems if it can be done without compromising industry standard proposed design temperature and humidity criteria.
- f. Consider a regime of boosting ventilation seasonally, especially in senior housing. Systems should be sized/ designed to accommodate MERV 13 filters on all outdoor (but not return) air intakes.
- g. Where applicable, use pleated filter media and appropriately sized filter housings with well-fitting filter slots and racks. Thicker (4") filters are more effective than thinner filters. Consider flexible, rather than permanent, solutions including manual Demand Control Ventilation (DCV) overrides, flushing sequences and bypass options on HVAC systems, and multi-speed fans. Incorporate standalone, plug-in filtration as needed.

# 3.4 DOMESTIC HOT WATER (DHW)

- a. All projects must utilize high-efficiency electric domestic hot water systems, including:
  - Central heat pump water heaters
  - Ground source systems tied to space conditioning system
  - Sub-central electric water heaters with plants that provide distribution on a floorby-floor basis where possible
  - Projects serving senior residents and/or containing supportive housing units should not assume tenant-paid hot water. Otherwise, in-unit/ resident-paid electric resistance water heaters may be allowed on HPD projects under the following conditions:
    - Project must demonstrate that when factoring in distribution losses, system is at least as efficient and cost effective as a central heat pump system
    - For projects considering resident-paid DHW, projects must receive prior permission from HPD Program and HPD Sustainability Office and must comply with the requirements of HPD's Resident-Paid Heating Requirements – including adjusting the M&O and rent to account for shifting costs

REACH

- Projects must underwrite the project using the appropriate utility allowance.
  - In-unit recirculation systems must be demand-initiated.
- Instantaneous electric hot water heaters may be used on common and commercial areas only.
- b. Heat Pump Water Heating (HPWH) equipment must comply w/ ENERGY STAR Water Heater requirements as applicable:
  - Residential: Energy Star Water Heater Key Product Criteria

#### Commercial:

- Energy Star Program Requirements for Commercial Water Heaters
- c. Heat Pump Water Heating (HPWH) equipment must have an AHRI Certificate if applicable.
- d. HPWH equipment must be capable of storing minimum 140 degree water at 5 degree outdoor air temperature.
- e. DHW systems shall be designed to store no more than 0.5 gallon of water in any piping/ manifold between any fixture and the water heating source or recirculation line. No more than 0.6 gallon of water shall be collected from the fixture before a 10-degree Fahrenheit rise in temperature is observed.
- f. All Heat Pump Water Heating equipment must be installed per HPD's Technical Requirements for Heat Pump Water Heaters and should follow the guidelines outlined in HPD's Best Practices Documents.
- a. Incorporate drain-water or wastewater heat recovery to the extent feasible.
- b. Harvest, treat, and reuse greywater to meet a portion of the project's non-potable water needs

Note that tenantpaid electric hot water must meet the requirements of HPD's Electric Heating Policy a. Preset all units with reasonable and code-compliant heating & cooling temperatures, typically

Heating: 70 degrees daytime and 66 degrees night-time. Minimum temperatures during heating season must comply, at minimum, with NYC's Heat Laws

Cooling: 76 degrees occupied, and 82 degrees when away

- b. Preset maximum/minimum limits to prevent overuse, typically 74 degrees maximum for heating (or 76 degrees for seniors) and 72 degrees minimum for cooling. Note that these are recommendations and may be adjusted per the Owner's discretion.
- c. Preset off hour controls with thermostatic setback controls that are controlled by either an automatic time clock or programmable\control system.
- d. Provide easy-to-read guidance in multiple languages (e.g., signage, videos, etc., for residents on system use and energy saving thermostat settings, especially where heating is resident-paid. Refer to HPD's Resource Packet for Residents.
- e. In common areas, remote wall thermostats accessible to the public should be in a locked enclosure and controlled by the building operations team.
- f. A 7-day programmable thermostat is required, per the energy code. Controls shall be fixed, wall-mounted types that are simple and easy to read and adjust.

## **3.6 SYSTEM COMMISSIONING**

- All HVAC systems, including at least 20% of heating systems not meeting the minimum capacity required by NYC, should be commissioned per the functional testing via the ENERGY STAR National HVAC Functional Testing Checklist (the most current version available).
- All compressor-based units with >70% Outside Air must include seasonal tuning and adjustment including 1 week of trend data showing proper operation of energy recovery, temperature and humidity control.
- c. Buildings with Central VRF based systems shall
  - Meet manufacturers extended warranty requirements.
  - Show error logs for at least 1 week of operation during 1 heating and 1 cooling season at normal occupied conditions and loads, all units shall be labeled by apt number.

For further reference: ENERGY STAR Functional Testing Checklist and ENERGY STAR Field Checklist REQUIREMENTS

# **SECTION 4 / ENERGY EFFICIENCY & ENVELOPE**

Reducing energy use is a key step toward decarbonization but is especially critical to ensure that electrification doesn't increase energy costs or burdens on the grid. Optimizing building envelopes, offsetting loads with solar, and reducing energy use with efficient fixtures will reduce energy costs, reduce impacts on the NYC electric grid, and put buildings on a path to meet long term decarbonization goals. Requirements for this section are generally covered by the NYC Overlay of Enterprise Green Communities (EGC) or, where applicable, LEED.

Requirements that are not covered by EGC or LEED include:

#### 4.1 SOLAR

- a. All projects are subject to Local Laws 92 & 94. Starting November 15, 2024, DOB will no longer accept feasibility exemptions for affordable housing. Also, projects are no longer subject to HPD's Solar Where Feasible Mandate and are not required to submit a Solar Feasibility Analysis, but are required to underwrite solar savings if project contains solar.
- b. All solar projects are required to comply with HPD's Solar Technical Requirements.
- a. All projects, but especially projects with resident-paid heating or other utilities, should consider Community Shared Solar that provide at least 20% savings to benefit residents, either onsite or by subscribing residents to offsite Community Solar Projects. Through HPD's Solar Where Feasible Program, our non-profit partner Here Comes Solar can help owners explore onsite community solar options or connect residents with community solar projects.
- b. Projects are encouraged to consider battery storage, or where deemed infeasible, to design projects to accommodate storage in the future.

## **4.2 APPLIANCES**

- a. All ranges, cooktops, ovens and clothes dryers shall be all-electric, including commercial equipment.
- b. All refrigerators, dishwashers and clothes washers must meet or exceed ENERGY STAR where available. Commercial washers may be non-ENERGY STAR rated provided they meet or exceed the energy efficiency, quality, and reduced operational costs associated with ENERGY STAR rated appliances.
- a. Utilize induction cooking in lieu of electric resistance cooktops. Providing a starter set of cookware to tenants can be used to encourage participation in resident training events.

# REQUIREMENTS

REACH

REQUIREMENTS

REACH

or sign feasibility analyses, teams are strongly encouraged to continue utilizing the tool to assess for LL92/94, to optimize their design and maximize incentives, and to estimate solar savings for underwriting purposes. Solar One will continue to provide assistance on request. Further information can be found on HPD's Solar Where Feasible webpage.

Although HPD no

System-based waivers may be available at the sole discretion of HPD if project can demonstrate that electrification of a system or an appliance is technically or financially infeasible. If waived, system should be designed to be "Electric Ready" per the guidance in Appendix B to the extent that the utility can provide service. Projects that do not provide parking in a lot are exempt from this requirement.

Waivers may be available at the sole discretion of HPD if project can demonstrate that the requirement is technically or financially infeasible and is not otherwise required by codes ar laws.

REQUIREMENTS

# **4.3 ELECTRIC VEHICLE CHARGING**

- a. Provide infrastructure to accommodate future EV charging in all parking lots and garages, regardless of the project's affordability status or AMI levels. Electrical raceway to the electrical supply panel serving the garage shall be capable of providing a minimum of 3.1 kW of electrical capacity to at least 20% of the parking spaces, or as required by code.
- b. Provide at least one Level 2 electric vehicle (EV) charging station for 5% of parking spaces provided in a project. EV charging stations shall be equitably distributed throughout the project to allow residents equal convenience in accessing the EV charging stations and must serve at least %5 of accessible parking spaces, or as required by code. Note that typically one charger can serve two parking spaces.
- For projects with individual driveways, provide a dedicated branch circuit that is not less than 40-amp and 208/240-volt terminating in a receptacle for EV charging capabilities
   located adjacent to the driveway.
- a. Provide infrastructure to accommodate future EV charging for up to 60% of parking spaces in all parking lots and garages.
- b. Provide at least one Level 2 electric vehicle (EV) charging station to up to 20% of all parking spaces.
  - c. Provide safe and secure means for parking and charging e-bikes and other micromobility devices for at least 10% of regular building occupants.

## **4.4 BUILDING ENVELOPE**

- a. Buildings must minimize geometric irregularities that negatively impact a building's ability to air-seal or achieve high levels of energy efficiency.
- b. Design envelope based on forward looking climate data. Refer to Table 2 of the Climate Resiliency Design Guidelines for data.
- Provide shading on all south and west-facing windows to mitigate solar heat gain during summer months. This can include appropriately designed exterior shading including louvers, awnings, or deep recesses.
- b. Avoid large expanses of unshaded glazing, especially on south and west facades.
- In high heat areas, especially for south and west-facing walls, use exterior wall finishes that are light in color and/or exhibit an initial solar reflectance of at least 0.60 and exhibit an initial thermal emittance of at least 0.75. Vegetated walls would also be acceptable.

REQUIREMENTS

REACH

# **SECTION 5 / HEALTH & WELLNESS**

The items in this section cover measures that contribute to the health, safety, and wellbeing of residents during and after construction. Additional Requirements related to Health and Wellness are covered by the NYC Overlay of Enterprise Green Communities (EGC) or, where applicable, LEED. In the event of a conflict between requirements in these Guidelines and the most current EGC or LEED requirements adopted by the agency, the more stringent requirement shall prevail.

#### **5.1 HEALTHY & ENVIRONMENTALLY RESPONSIBLE MATERIAL**

- a. Coordinate with structural engineer to incorporate low-carbon concrete specifications for all batch plant ready-mixed concrete where practicable and not preempted by State or Federal requirements. Specifications may include less cement, limestone cement and low-carbon concrete mixes, fly ash, slag, calcined clays, larger aggregate, and longer cure times.
- b. Specify concrete block with high supplementary cementitious material (SCM) content.
- c. Submit a publicly disclosed Environmental Product Declaration (EPD) for all structural concrete and steel on the project.
- a. Use recycled steel and/or steel from electric arc furnaces (EAFs) to the extent possible.
- b. Specify concrete block with carbon sequestering additives or Carbon Cure technology, which can reduce CO2 by 25%.
- c. Do not utilize foam-based insulation containing flame retardants or that are made with HCFCs and PFCs – including extruded polystyrene (XPS) and closed cell spray foam insulation.
- d. Avoid PVCs and phthalates, which are common in many building materials, especially vinyl flooring.
- e. Complete a Whole Building Life Cycle Assessment or Hotspots Analysis
- f. Use low emission construction machinery where available.
- g. Use lower-density block on upper floors where strength requirements are lower.
- Procure publicly disclosed Environmental Product Declaration (EPD) for as many products as feasible, prioritizing concrete, steel, and insulation as well as major building elements including wallboard, exterior cladding, and paints/coatings.
- i. When proposing product substitutions for lower embodied carbon products, submit final product data to HPD to add to HPD's pending database of clean/ safe products. Products may be submitted here: GreenCommunities@hpd.nyc.gov with the subject line "Design Guidelines Product EGP"

- a. Per DSNY, all new construction with at least 150 dwelling units are required to submit a Waste Management Plan and schedule a consultation with DSNY early in the design process.
- b. All other projects are required to use the DSNY Waste Calculator (or other similar calculator including the Zero Waste Design Waste Calculator) and are strongly encouraged to schedule a free 1-hour consultation w/ DSNY on Zero Waste Strategies EARLY in design process.
- c. Projects must provide refuse storage at a rate of 2.9 cubic feet per dwelling unit to allow for future waste stream collection. Cardboard breakdown areas located proximate to mail and package delivery room may be counted toward this requirement.
- d. Buildings must participate in the DSNY's Curbside Composting program, now available to all NYC residents citywide.
- a. Buildings with 10 or more units shall:

Require building management to attend DSNY's free 9-hour Zero Waste Training.

Design for and enroll in DSNY's free eCycle and reFashion programs.

 b. On-site source separation of materials should be practiced to the greatest extent feasible. BLDS encourages separate bins for recycling of organic waste, and designated space for the recycling of cardboard, electronics, textiles, and special waste such as paint, light bulbs, etc.

#### **5.3 ACTIVE DESIGN**

The City of New York and partners published Active Design: Affordable Designs for Affordable Housing as a guide for designing affordable housing developments that benefit resident health and well-being. The document supplements New York City's Active Design Guidelines, which outline a broad array of architectural and urban design strategies to encourage, walking, bicycling, climbing stairs, using transit, active recreation, and a healthy diet. Active Design: Affordable Designs for Affordable Housing is more focused on feasible, low-cost strategies to integrate active design in affordable housing developments. The principles outlined in this document must be considered for new HPD development projects.

# SECTION 6 / ACCESSIBILITY & AGE-FRIENDLY DESIGN

HPD-assisted projects must comply with federal accessibility laws and regulations including Section 504 of the Rehabilitation Act of 1973, the Fair Housing Act, and HUD's implementing Regulations (24 CFR Parts 8' and 100, respectively). HPD team must also affirmatively further the goals of the Fair Housing Act. These, and related laws and regulations, prohibit discrimination based on disability and establish design requirements for program accessibility and physical accessibility in connection with housing programs. In addition, HPD team must ensure that such comply with the local accessibility requirements of Chapter 11 of the New York City Building Code. As an assurance that HPD-assisted projects meet all the applicable accessibility laws and regulations, each architect must provide an "Accessibility Statement", pre-construction and post-completion, certifying that the design and construction of the project complies with the accessibility requirements of the New York City Building Code, Section 504 of the Rehabilitation Act of 1973, and the Fair Housing Act, as applicable. The form is available in the Appendices section.

# **6.1 FAIR HOUSING ACT**

All new construction housing projects built for first occupancy after March 13, 1991 consisting of four or more units are required to comply with the design and construction requirements of the Fair Housing Act. A Joint Statement of The United States Department of Housing and Urban Development and U.S. Department of Justice, Accessibility (Design and Construction) Requirements for Covered Multi-family Dwellings Under the Fair Housing Act, dated April 30, 2013 included ten (10) safe harbors satisfy these requirements. The Joint Statement is available at http://www.ada.gov/doj\_hud\_statement.pdf. Information on the Fair Housing Act design and construction requirements is also available at https://www.fairhousingfirst.org/

## 6.2 SECTION 504 OF THE REHABILITATION ACT OF 1973

All HPD-assisted projects (including Inclusionary Housing) with five or more dwelling units must comply with the accessibility requirements of Section 504 of the Rehabilitation Act of 1973. Section 504 requires that, for projects involving the new construction of housing containing five or more dwelling units and for projects involving the substantial alteration of housing containing 15 or more dwelling units, a minimum of five percent (5%) of the total number of dwelling units must be accessible and designated for households with a person with a mobility-impairment. An additional minimum of two percent (2%) of the total dwelling units must be designated for households with a person with a mobility-impairment. An additional minimum of two percent (2%) of the total dwelling units must be distributed throughout the project and made available in a sufficient range of sizes as not to limit the choice of individuals/ households with physical impairments. These units must be distributed proportionally across affordability brackets to the extent possible. In a mixed market-rate/Inclusionary development project, the 5% and 2% requirements apply both to the project in its entirety and to the Inclusionary portion considered separately. When calculating the required minimum number of accessible units, any fraction of a whole number must be rounded up (as described in HUD Notice PIH 2010-26).

For further reference, see the HPD Accessibility Guide.

Various laws, regulations, and architectural standards use the terms "accessible" and "adaptable". For the purposes of this document, the term "accessible" is used throughout, with the recognition that the apartments/units may require adaption (e.g. installation of grab bars, lowering of countertop height, etc.) to meet the specific needs of households or individuals.

While 24 CFR Part 8 Regulations indicate the minimum of 5% mobility impairment and minimum of 2% hearing or visual impairment requirements apply to projects receiving federal assistance, subsequent civil rights laws broadened the requirement to all programs and activities of housing agencies, such as HPD, that receive federal assistance The Uniform Federal Accessibility Standards (UFAS) or the 2010 ADA Standards for Accessible Design serve as the design standards for compliance with Section 504 of the Rehabilitation Act of 1973. The requirements for new construction and substantial alteration projects differ from those for moderate alterations of existing housing; refer to Section 8.23 "Alterations of Existing Housing Facilities" of the implementing regulations.

#### 6.3 2010 AMERICANS WITH DISABILITIES (ADA) STANDARDS

Places of public accommodation and commercial facilities (e.g. retail spaces, community facilities, leasing offices, etc.) must comply with the Americans with Disabilities Act (ADA) guidelines, 2010 ADA Standards for Accessible Design.

For architects seeking to use the 2010 ADA standards to meet the Section 504 requirement, HUD has identified certain provisions in the 2010 Standards that provide less accessibility than is currently required by UFAS and/or HUD's Section 504 regulation. As a result, HUD is not deeming use of those specific provisions of the 2010 Standards as a means of providing accessibility under Section 504. For more information and instructions for use of this alternative design standard, please refer to the HUD notice.

#### **6.4 AGE-FRIENDLY DESIGN**

Many adults prefer to live in their own home and community as they age, wishing to live safely, comfortably, and independently for as long as possible. In addition to the requirements set forth in the Guidelines for Senior Housing projects, BLDS encourages cost-effective measures to implement the recommendations of Aging in Place Guide for Building Owners.

- a. Provide sufficient, consistent light levels throughout the building and site, especially on pathways and at entrances.
- b. Install dual handrails and slip-resistant stair strips in common and exterior areas.
- c. In all dwelling units in elevator buildings, and ground floor units where ground floor is accessible, include grab bars & accessible bathroom fixtures (including walk-in/low threshold showers, ADA-compliant toilets, sinks with removable cabinets, and antiscald devices).
- d. Design interior and exterior doors to be easily accessible, including minimal thresholds/
  saddles, lever handles, and/or automatic openers.
- REACH

# **SECTION 7 / BROADBAND**

Right now, half of New Yorkers living in poverty do not have internet at home. The neighborhoods with the lowest rates of internet adoption are also the focus of most of the City's affordable housing development. Multifamily housing projects present opportunities to close this digital divide and improve the socioeconomic outcomes of many of the city's most vulnerable populations. Internet service that is robust enough to perform daily tasks is essential for enrolling in government programs, seeking employment, and attending college. Broadband has become as necessary as a utility.

These design guidelines outline the requirements for the installation of fast and reliable broadband for all HPD-assisted multifamily projects currently in HPD's development pipeline. "Fast" is defined as speeds of at least 100 Megabits per Second (Mbps) upload and download, per unit, while "reliable" is defined as 99.9% uptime for the service.

- a. Broadband service must be part of the tenant's lease contract and at no additional cost to the tenant.
- b. Provide wireless service in common areas, including: lobbies, lounges and common rooms, laundry rooms, outdoor areas, and other shared spaces.
- c. Speeds must be at least 100 Mbps upload and download, per apartment.
- d. Each household must have secured access through a unique profile.
- e. Households should be given the option to enhance their individual level of service at their own cost, if additional service plans are offered by the internet service provider.
- f. The building may choose to contract with and/or provide access to one or more internet service providers (ISPs), including fiber ISPs, wireless ISPs, and managed ISPs.
- g. While available, ISPs should take advantage of the Federal Affordable Connectivity Program (ACP), if applicable.
- h. Installation: Fiber to be run vertically from the network switch in the basement to the rooftop for use by a wireless internet service provider.
- i. Distribution: Fiber or cable to terminate at a hallway access point (hotspot) outside groups of multiple dwelling units.
- j. Building owners should retain ownership of the network infrastructure within the building. As a result, maintenance should be part of the contract with the ISP.
- k. All vertical and horizonal cabling pathways should be easily accessible and have room for the addition of more cabling in the future.
- l. The building's network equipment should be accessible both in the basement and from the rooftop of the building.

In the Inclusionary Housing incentive programs (either MIH or VIH) that are not subsidized through any HPD Loan Programs and projects receiving 421-a tax credits only are not subject to these guidelines. a. Installation: Fiber is in a conduit that is trenched from the basement to the nearest telecommunications vault in the street and connected to a network switch in the basement. Additionally, fiber run from the network switch in the basement to the rooftop for use by a wireless internet service provider, or

Fiber is in a conduit that is trenched from the basement to the nearest telecommunications vault in the street and connected to a network switch in the basement.

b. Distribution: Fiber or cable terminates in the living room or an easily accessible area of each dwelling unit at a wall jack, where it can be plugged into a router, or

Fiber or cable terminates at a ceiling-mounted access point (hotspot) in each dwelling unit vestibule.

# **SECTION 8 / BUILDING OPERATIONS**

Regular building Operations & Maintenance (O&M) practices minimize building maintenance needs and utility consumption and ensure a healthy, safe, and durable living environment for residents. Additional Requirements related to Building Operations are covered by the NYC Overlay of Enterprise Green Communities (EGC) or LEED where applicable.

## **8.1 BENCHMARKING & DATA COLLECTION**

- a. All projects with 5+ unit buildings are required to benchmark energy and water use per HPD's Benchmarking Protocol.
- b. Buildings are required to retain a listed, pre-qualified benchmarking service provider for the restriction period governed by the regulatory agreement.
- Submit projected and actual energy/water use data directly to HPD upon request and allow data to be published.

#### **8.2 RESIDENT RESOURCES**

a. An HPD Resource Packet for Residents must be provided to residents who pay for their own electric heating and hot water and is a useful resource to any resident who has heat pumps or pays for utilities. Link: https://nyc-csg-web.csc.nycnet/site/hpd/servicesand-information/underwriting-electric-high-performance-buildings.page

# **SECTION 9 / COMMERCIAL & RETAIL SPACES**

HPD is interested in the long-term viability of retail space in affordable housing developments. To succeed, spaces must be able to address the needs of existing neighborhood contexts and adapt to changes in those needs. In collaboration with the Design Trust for Public Space, HPD has developed guidelines of the most cost-effective strategies to develop high-quality, flexible retail spaces. The publication is available on HPD's website. REQUIREMENTS

REACH

REQUIREMENTS

# DESIGN REQUIREMENTS

CHAPTER 3

# REQUIREMENTS

REQUIREMENTS

REACH

# SECTION 1 / SITE PLANNING

Projects must consider the logistical and financial constraints of construction on their site and optimize their design proposals. While every site and program are unique, the following general principles should be addressed:

- a. Avoid excessive excavation. Particularly in areas with unknown subsurface conditions, and where rock or high water tables are prevalent, proposed cellars may have to be reduced, relocated, or even eliminated. Early planning for such contingencies (including determining alternate locations and even eliminating cellars in some locations) may preserve essential design elements.
- b. Avoid underpinning adjacent structures by locating excavation areas away from them when possible.
- c. Avoid excessive lot-line windows. Such fenestrations are subject to additional code requirements, as outlined in the Department of Buildings-issued 'Buildings Bulletin 2015-17' issued by the Department of Buildings.

# **SECTION 2 / BUILDING EXTERIOR**

- a. The massing of buildings should relate to the surrounding context, avoiding abrupt changes in height from adjacent buildings and deviations from the street wall. Proportions, dimensions, and spacing of fenestration should complement neighborhood patterns.
- b. Avoid overcomplicated geometry and design irregularities which negatively impact a building's ability to air-seal or achieve high levels of energy efficiency.
- c. Avoid overglazing and minimize unshaded glazing that will contribute to solar heat gain in summer.
- d. Articulation of massing, material, color, and texture should be used to define elements of buildings. Building facades should be dynamic: HPD encourages variation in the type, color, texture, and depth of material in the building envelope to create a sense of depth with light and shadow and to avoid a flat, planar appearance.
- e. All HPD projects should be constructed of high quality, attractive, sustainable, and durable materials that minimize maintenance costs. When choosing exterior finish materials, consider the new building's relationship to the surrounding neighborhood in terms of color, texture, and pattern.
- f. Avoid matching materials and patterns of nearby affordable housing.
- a. Designs should relate to the human scale at the base level and activate the ground floor along the street frontage. The main residential entrance should be distinguished from the rest of the building and should provide shelter from inclement weather.

# **SECTION 3 / OUTDOOR SPACES**

- a. All areas of programmed outdoor space must be fully mobility-impaired accessible, and changes in elevation must be shown on all plans included in the submission.
- b. Paved areas must be constructed of cost-effective and durable materials.
- c. Outdoor spaces must provide reasonable amount of seating spaces.
- d. Provide low-maintenance, attractive landscaping that incorporates native plants (or plants adapted to the local climate) to limit the need for artificial irrigation.
- a. Maximize the tenant use of outdoor space including all yards at ground level, terraces, and rooftops.
- b. When providing multiple outdoor spaces, differentiate each space through design and programming.
- c. Provide outdoor electrical outlets for resident use and special events.
- d. In developments including family-oriented dwelling units, provide a toddler play area with safe equipment and matting located to allow nearby supervision. Group play areas with other programmatic elements such as laundry rooms, outdoor seating, and recreation spaces. Play areas should be secured and screened from street traffic.
- e. Reduce impervious surfaces and include green infrastructure elements that help reduce stormwater runoff while providing benefits such as cleaner air, habitat, and aesthetic value.
- f. HPD encourages landscaping that reduces heat island effects and keeps outdoor spaces comfortable including light colored surfaces, green roofs and shade trees. These measures will be increasingly valuable as temperatures rise due to climate change. Note that per Local Laws 92 & 94, buildings will be required to install solar or green roofs on available roof area, with certain exceptions including roofs used for recreational purposes.

REACH

# **SECTION 4 / BUILDING PLANNING**

# **4.1 LOBBY & CIRCULATION**

- a. Each building must have a ground floor residential entrance lobby that is distinctly articulated and clearly visible from the street. This lobby must be restricted exclusively to residential use and must be entirely separate from the circulation of non-residential uses such as commercial, retail, or community facilities.
- b. The residential lobby must be an inviting space, distinguished from corridor circulation by choice of materials, high ceilings, seating areas or other design strategies. The lobby must have ample daylight and a direct view to the street or landscaped areas.
- c. Residential corridors must be at least 5'-0" clear width from wall to wall with minimal obstructions.
- d. Separate residential circulation, including secondary means of egress, from that of nonresidential uses (except for Use Group III Community Facilities.)
- a. Larger buildings, particularly those with multiple building segments, should provide multiple lobbies, each with direct ingress and egress.
- b. Building services—including waste management, utilities, janitorial and mechanical rooms—should not open directly into the lobby.
- c. Mailroom or mail alcove should be located in an area that is visible and accessible from the lobby. The residential lobby establishes circulation patterns within the building: the primary vertical circulation/elevator must be visible and accessible from the lobby.
- d. BLDS encourages natural lighting throughout public circulation spaces and corridors, and separation of these corridors from trash route.
- e. A parcel room is recommended to store delivered packages. Note that USPS still requires parcel lockers even if a parcel room is provided.
- f. Locating cardboard breakdown area and associated recycle bin in parcel room and paper recycle bin in mail room can improve waste diversion.
- g. On each floor, the public circulation space should be minimal. Long corridors are strongly discouraged except when designed to capture natural light: location of 3- and 4-bedroom units at the ends of corridors may reduce corridor length. The interior circulation system should minimize changes in corridor direction, recesses, and offsets.
- BLDS recommends a centralized core to diminish travel distances and multiple vertical circulation cores for larger buildings. Walking distance from the elevators to the farthest unit should not exceed 180 feet.

REACH

## **4.2 ELEVATORS**

Planning and functionality of elevators in each building greatly impacts the quality of life of its residents, especially seniors and people with disabilities. When elevators are required, the following elevator chart must be used to determine the minimum number of passenger elevators based on the number of stories and residents. Elevator Occupant Load is calculated by assuming 2 people per bedroom and 1.5 people per each 0-bedroom or Efficiency unit. Note that service elevators may not be considered for general passenger use and do not count towards requirements of passenger elevators specified here.

REACH REQUIREMENTS

a.

a.

If a building requires more than one passenger elevator, elevators must be grouped together to minimize the impact of service and repair on traffic.

b. Each building segment must be served by at least two elevators, unless the building
 requires fewer than two elevators in total.

BLDS encourages accommodation of excess capacity so that vital traffic is maintained when one car is out of service.


# **REQUIRED NUMBER OF ELEVATORS**

#### EXAMPLE A

If a multifamily building is 12 stories and has a mix of (60) 0-bedrooms, (25) 1-bedrooms and (10) 2-bedroom units, the required number of elevators should be calculated as follows:

0-bedroom: 60 x 1.5 = 90 1- bedroom: 25 x 1 x 2 = 50 2-bedroom: 10 x 2 x 2 = 40

total elevator occupant load = 90 + 50 + 40 = 180

Per the chart above, the building requires (2) passenger elevators.

# **4.3 COMMON SPACES**

BLDS recommends providing a variety of thoughtfully designed and situated common spaces in all new buildings to the extent that they enhance the tenant experience and promote resident engagement. However, common spaces must not be so excessive as to reduce the number, capacity, or quality of residential units in the building. Otherwise, the occupancy and program of each space should determine its size, finishes, and furniture capacity.

- Resident Recreation Space must be located adjacent to primary entryways, circulation, or outdoor space. This space should be adaptive to various uses and have access to natural light.
- b. Laundry Room must be conveniently located and directly accessible from the public circulation.
- c. Children's Play Room, when provided, must be furnished with safe, durable, and aesthetically pertinent finishes.
- d. **Bicycle Storage** is required by ZR 25-80 and should be located near circulation and easily accessible by the tenants.
- a. Recreation Spaces should be considered for use as areas of refuge in the event of prolonged loss of utility service. Such spaces should be powered by an emergency generator, climate controlled, and equipped with charging stations and refrigerators (for storing essentials such as medicine).
- b. Laundry and Exercise Rooms to be located in areas with direct access to fresh air and natural light.
- c. Children's Play Room to be visible from other common spaces, such as the laundry room or tenant recreation space.
- d. Storage Area should be provided when possible, and located in a secure and fully
  accessible Storage for residents. The storage area should be close to the elevator core.

The New York City Zoning Resolution establishes minimum areas, dimensions, and design requirements for common spaces in Quality Housing buildings, including tenant recreation spaces and refuse storage, and it incentivizes the inclusion of laundry facilities in these buildings.

REACH

REQUIREMENTS

# **SECTION 5 / APARTMENT PLANNING**

The following pages describe the unit requirements and calculation methodology. HPD Program may permit limited variation from these requirements. For consideration, a proposal must identify known areas of non-compliance no later than the Design Consultation submission, accompanied by an explanation of the rationale behind design decisions, project constraints, and other considerations contributing to non-compliance. Projects receiving Housing Trust Fund (HTF) funding may exceed the maximum allowable areas, up to the lower end of the unit area ranges required by the New York State Homes and Community Renewal (HCR) Design Handbook.

# **5.1 UNIT DISTRIBUTION & EQUITABILITY**

- Amenities and resources must be equitably distributed among the dwelling units in a project. For instance, if any units have in-unit washer/dryers, then all units must have in-unit washer/dryers.
- b. All units must have the same level of access to common areas.
- c. In the event that a project comprises of multiple buildings, building segments, or otherwise duplicative building elements (e.g. multiple lobbies in a large building), such elements must be designed and operated similarly.

Some projects must separate units into categories, which may be differentiated based on intended population (senior, supportive housing), financing (in mixed market and Inclusionary projects), types of accessibility ('Section 504' designated units for mobility impaired / hearing and visually impaired), or by income band, among other distinctions. These categories must be:

- d. Distributed throughout the building and/or project to the maximum extent feasible so as to maximize options and choice.
- e. Distributed both horizontally and vertically (note that Inclusionary projects have separate specific requirements).
- f. In the event of overlapping categories, the requirements must be applied proportionally. For instance, a project including both market units and Inclusionary affordable units must apply Section 504 accessibility requirements to the project as a whole, but must also meet the requirements within the affordable units considered separately.

# **5.2 ADJACENCY**

REQUIREMENTS

REACH

a.

The design of dwelling units must consider not only the unit itself, but the unit situated in relation to other units in the building, internal circulation patterns, exterior spaces, building systems and equipment, and other buildings.

a. Unit entrances must be located and designed to preserve the privacy of residents: they should not abut common areas, should not be visible from prominent windows, and should not directly face high circulation areas such as elevator cores, doors to common spaces, or stairs.

b. Unit windows (especially bedroom windows) must not face common areas, public areas, or mechanical equipment without adequate screening, sound attenuation, and/or vertical separation.

Unit windows should avoid facing directly into other unit or common windows.

Dwelling unit area calculation refers to the area within the perimeter walls, which includes all area between the finished surfaces of all exterior walls and demising partitions.

Structural members that are integral components of exterior walls and demising partitions, as well as all mechanical and plumbing chases will be excluded from area calculations for the purpose of determining compliance with unit size requirements. Structural members (such as freestanding columns) that are not integral components of exterior walls or demising partitions will be included in the unit and room area calculations. PTACs or similar equipment protruding less than 1'-0" into the space under a window will not be deducted from area calculations but will be considered for maneuvering clearances.

Room area is calculated to include the space meeting the minimum dimensions stipulated in the unit design requirements. Room area must generally maintain a minimum 8'-0" ceiling height. However, BLDS will accept a soffit that reduces ceiling height to no less than 7'-0" at the perimeter of a room only, and only providing that the space maintains sufficient area and minimum room dimension at 8'-0" ceiling height to comply with Building Code and other requirements.

Measurements are taken to the finished face of demising partitions and exterior walls.

Mechanical and plumbing chases are NOT included in the unit area.

Structural, mechanical, and plumbing elements embedded in or protruding from exterior walls or demising partitions are NOT included in the unit area.

Freestanding structural elements are included in the unit area.

Room area only includes spaces with minimum required dimensions.



ROOM AREA CALCULATION DIAGRAM





ROOM AREA CALCULATION



#### **5.3 DESIGN REQUIREMENTS FOR EFFICIENCY UNITS**

Buildings with Supportive Housing units may opt to use Efficiency units throughout the building in lieu of 0-Bedrooms. Buildings may not include both Efficiency and 0-Bedroom units.

- a. The Efficiency unit, is a Class A apartment must consist of the following:
  - Living Room/ Dining Area /Sleeping Area (LR/DA/SA)
  - Kitchenette\* consisting at minimum of a 30-inch range, 24-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, one continuous 30-inch work surface with removable base cabinets underneath, and adequate wall hung cabinets above countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This kitchen must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided, but must total no less than four (4) feet wide, and no segment may be less than two (2) feet wide. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

Efficiency	LR/SA/DA	STORAGE	TARGET NET
Area	160 sf	10 sf	300-350 sf**
Min. Dim.	9'-0"	see description	-

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the *Universal Federal Accessibility Standards*, in accordance with Section 504 of the *Rehabilitation Act of 1973*, and all units in vertical line with such units, may exceed target net area by up to 25 sf. Efficiency Units in buildings containing any Affordable Independent Residences for Seniors (AIRS) units must be minimally 325 sf.









DWELLING UNIT AREA
 ROOM AREA

# Efficiency Unit Diagrams

# **5.4 DESIGN REQUIREMENTS FOR 0-BEDROOM UNITS**

- a. The 0-Bedroom unit, is a Class A apartment must consist of the following:
  - Living Room/ Dining Area /Sleeping Area (LR/DA/SA)
  - Kitchenette\* consisting at minimum of a 30-inch range, 24-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, one continuous 30-inch work surface with removable base cabinets underneath, and adequate wall hung cabinets above countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This kitchen must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided but must total no less than four (4) feet wide, and no segment may be less than two (2) feet wide. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

0-BR	LR/SA/DA	STORAGE	TARGET NET
Area	200 sf	10 sf	350-400 sf**
Min. Dim.	9'-0"	see description	-

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the Universal Federal Accessibility Standards, in accordance with Section 504 of the Rehabilitation Act of 1973, and all units in vertical line with such units, may exceed target net area by up to 25 sf.





# UNIT 0-c 361 SF

Section 504 Mobility Impaired Unit



Drawings for illustrative purposes; refer to Guideline text and other applicable regulations for requirements

0-Bedroom Unit Diagrams

# **5.5 DESIGN REQUIREMENTS FOR 1-BEDROOM UNITS**

- a. The 1-Bedroom unit is a Class A apartment must consist of the following:
  - Bedroom with a closet, allowing flexible furniture arrangement.
  - Living Room / Dining Area allowing suitable furniture placement
  - Kitchen / Kitchenette\* consisting at minimum of a 30-inch range, 24-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, base cabinets with at least three (3) linear feet of countertop surface (including one continuous 30-inch work surface with removable base cabinets underneath), and adequate wall hung cabinets over countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This room must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided but must total no less than four (4) feet wide, and no segment may be less than two (2) feet wide. BLDS recommends providing a variety of closet configurations in similar layouts when possible. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

1-BR	LR/DA	BR	STORAGE	TARGET NET
Area	170 sf	110 sf	12 sf	500-550 sf
Min. Dim.	9'-0"	9'-6"	see description	-

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the Universal Federal Accessibility Standards, in accordance with Section 504 of the Rehabilitation Act of 1973, and all units in vertical line with such units, may exceed target net area by up to 25 sf.



# UNIT 1-b 513 SF

Section 504 Mobility Impaired Unit



Drawings for illustrative purposes; refer to Guideline text and other applicable regulations for requirements

1-Bedroom Unit Diagrams

**DWELLING UNIT AREA ROOM AREA** 

1-Bedroom Unit DiagramS

UNIT 1-c 518 SF

UNIT 1-d 504 SF





DWELLING UNIT AREA



# **5.6 DESIGN REQUIREMENTS FOR 2-BEDROOM UNITS**

- a. The 2-Bedroom unit is a Class A apartment must consist of the following:
  - Bedrooms, each with a closet, allowing flexible furniture arrangement.
  - Living Room / Dining Area allowing suitable furniture placement
  - Kitchen / Kitchenette\* consisting at minimum of a 30-inch range, 30-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, base cabinets with at least three (3) linear feet of countertop surface, (including one continuous 30-inch work surface with removable base cabinets underneath), and adequate wall hung cabinets over countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This room must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided but must total no less than eight (8) feet wide, and no segment may be less than two (2) feet wide. BLDS recommends providing a variety of closet configurations in similar layouts when possible. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

2-BR	LR/DA	BR	BR2	STORAGE	TARGET NET
Area	170 sf	110 sf	100 sf	20 sf	650-725 sf
Min. Dim.	10'-0"	9'-6"	9'-0"	see descriptio	n –

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the Universal Federal Accessibility Standards, in accordance with Section 504 of the Rehabilitation Act of 1973, and all units in vertical line with such units, may exceed target net area by up to 25 sf.





# Section 504 Mobility Impaired Unit



**2-Bedroom Unit Diagrams** 

**DWELLING UNIT AREA ROOM AREA** 

**2-Bedroom Unit Diagrams** 



UNIT 2-c 653 SF



DWELLING UNIT AREA
 ROOM AREA



#### **5.7 DESIGN REQUIREMENTS FOR 3-BEDROOM UNITS**

- a. The 3-Bedroom unit is a Class A apartment must consist of the following:
  - Bedrooms, each with a closet, allowing flexible furniture arrangement.
  - Living Room / Dining Area allowing suitable furniture placement
  - Kitchen / Kitchenette\* consisting at minimum of a 30-inch range, 30-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, base cabinets with at least three (3) linear feet of countertop surface (including one continuous 30-inch work surface with removable base cabinets underneath), and adequate wall-hung cabinets over countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This room must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Secondary Bathroom / Half-bath minimally containing a sink and toilet.
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided but must total no less than twelve (12) feet wide, and no segment may be less than two (2) feet wide. BLDS recommends providing a variety of closet configurations in similar layouts when possible. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

3-BR	LR/DA	BR	BR2	BR3	STORAGE	TARGET NET
Area	170 sf	110 sf	100 sf	100 sf	26 sf	850-950 sf
Min. Dim.	10'-0"	9'-6"	9'-0"	9'-0"	see description	on –

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the Universal Federal Accessibility Standards, in accordance with Section 504 of the Rehabilitation Act of 1973, and all units in vertical line with such units, may exceed target net area by up to 25 sf.



# UNIT 3-b 857 SF



Drawings for illustrative purposes; refer to Guideline text and other applicable regulations for requirements

**3-Bedroom Unit Diagrams** 

DWELLING UNIT AREA
 ROOM AREA





**3-Bedroom Unit Diagrams** 

DWELLING UNIT AREA
 ROOM AREA



#### **5.8 DESIGN REQUIREMENTS FOR 4-BEDROOM UNITS**

- a. The 4-Bedroom unit is a Class A apartment consisting of the following:
  - Bedrooms, each with a closet, allowing flexible furniture arrangement.
  - Living Room / Dining Area allowing suitable furniture placement
  - Kitchen / Kitchenette\* consisting at minimum of a 30-inch range, 30-inch refrigerator, 24-inch sink with a 30-inch removable base cabinet, base cabinets with at least three (3) linear feet of countertop surface (including one continuous 30-inch work surface with removable base cabinets underneath), and adequate wall-hung cabinets over countertops and appliances. Countertop segments must have a minimum width of nine (9) inches. Base cabinets must be two feet deep and countertops must be 25 inches deep. Shelving must be minimally 11.5 inches deep. This room must be accessible (see Accessibility Guide). Only electrical appliances will be allowed within dwelling units (including ranges, ovens, etc.).
  - Bathroom containing a bathtub and/or shower with a showerhead, a sink, and a toilet. This bathroom must be accessible (see Accessibility Guide).
  - Secondary Bathroom / Half-bath minimally containing a sink and toilet.
  - Storage including clothing closets, linen closets, pantry, and/or bulk storage. All clothing closets must be at least two (2) feet deep. The clothing closet space may be divided but must total no less than twelve (12) feet wide, and no segment may be less than two (2) feet wide. BLDS recommends providing a variety of closet configurations in similar layouts when possible. Separate linen closets are encouraged.
  - Office or Workspace (optional) designating a space with minimum dimensions of 4'-0" x 5'-0" not overlapping with other required spaces, circulation, or maneuvering clearances, and provided with an electrical outlet. Units with such spaces may exceed the maximum target net area by up to 25 sf.
- b. The areas in the following table describe minimum areas and dimensions to the inside finished surfaces of the walls and partitions. All spaces must be accessible. All doors must be 3'-0" wide minimum along accessible routes.

4-BR	LR/DA	BR	BR2 & 3	BR4	STORAGE	TARGET NET
Area	170 sf	110 sf	100 sf	88 sf	32 sf	950-1075 sf
Min. Dim.	10'-0"	9'-6"	9'-0"	9'-0"	see descripti	on –

\*Requirements for appliance sizes are listed as absolutes, but nominal sizing may be applied, especially in the case of high-quality appliances. Verify market availability of selected appliances and provide product dimensions

\*\*Units designed to the Universal Federal Accessibility Standards, in accordance with Section 504 of the Rehabilitation Act of 1973, and all units in vertical line with such units, may exceed target net area by up to 25 sf.



4-Bedroom Unit Diagrams

Drawings for illustrative purposes; refer to Guideline text and other applicable regulations for requirements

DWELLING UNIT AREA
 ROOM AREA

# HPD DESIGN GUIDELINES UNIT SIZE SUMMARY CHART

EFF.	LR/SA/DA	STORAGE	TARGET NET				
Area	160 sf	10 sf	300-350 sf				
Min. Dim.	9'-0"						
0-BR	LR/SA/DA	STORAGE	TARGET NET				
Area	200 sf	10 sf	350-400 sf				
Min. Dim.	9'-0"						
1-BR	LR/DA	STORAGE	TARGET NET	BR			
Area	170 sf	12 sf	500-550 sf	110 sf			
Min. Dim.	9'-0"			9'-6"			
						_	
2-BR		CTODAOE					
	LR/DA	STORAGE	TARGET NET	BR	BR2		
Area	170 sf	20 sf	TARGET NET 650-725 sf	BR 110 sf	BR2 100 sf	_	
						-	
Area Min. Dim.	170 sf 10'-0"	20 sf -	650-725 sf -	110 sf 9'-6"	100 sf 9'-0"	-	
Area Min. Dim. <mark>3-BR</mark>	170 sf 10'-0" LR/DA	20 sf - STORAGE	650-725 sf - TARGET NET	110 sf 9'-6" BR	100 sf 9'-0" BR2	BR3	
Area Min. Dim. <mark>3-BR</mark> Area	170 sf 10'-0" LR/DA 170 sf	20 sf -	650-725 sf -	110 sf 9'-6" BR 110 sf	100 sf 9'-0" BR2 100 sf	100 sf	
Area Min. Dim. <mark>3-BR</mark>	170 sf 10'-0" LR/DA	20 sf - STORAGE	650-725 sf - TARGET NET	110 sf 9'-6" BR	100 sf 9'-0" BR2		
Area Min. Dim. <mark>3-BR</mark> Area Min. Dim.	170 sf 10'-0" LR/DA 170 sf 10'-0"	20 sf - STORAGE 26 sf -	650-725 sf - <b>TARGET NET</b> 850-950 sf -	110 sf 9'-6" BR 110 sf 9'-6"	100 sf 9'-0" BR2 100 sf 9'-0"	100 sf 9'-0"	-
Area Min. Dim. <mark>3-BR</mark> Area Min. Dim. <mark>4-BR</mark>	170 sf 10'-0" LR/DA 170 sf 10'-0" LR/DA	20 sf - STORAGE 26 sf - STORAGE	650-725 sf - TARGET NET 850-950 sf - TARGET NET	110 sf 9'-6" BR 110 sf 9'-6" BR	100 sf 9'-0" BR2 100 sf 9'-0" BR2	100 sf 9'-0" BR3	BR4
Area Min. Dim. <mark>3-BR</mark> Area Min. Dim.	170 sf 10'-0" LR/DA 170 sf 10'-0"	20 sf - STORAGE 26 sf -	650-725 sf - <b>TARGET NET</b> 850-950 sf -	110 sf 9'-6" BR 110 sf 9'-6"	100 sf 9'-0" BR2 100 sf 9'-0"	100 sf 9'-0"	BR4 88 sf 9'-0"

# PROGRAM REQUIREMENTS

CHAPTER 4

# SECTION 1 / HOMEOWNERSHIP

Due to the divergent demands of homeownership relative to rental programs, HPD applies some design requirements uniquely to the units included in the homeownership programs.

- All units designed for homeownership projects (whether the unit itself is owner's unit or is a rental unit in a homeownership building) must include the necessary infrastructure and hook-ups for dishwashers and clothing washers and dryers in the units.
- b. All units must also comply with the following unit size requirements:

UNIT TYPE	MINIMUM	MAXIMUM
0-BR	400 sf	475 sf
1-BR	550 sf	650 sf
2-BR	725 sf	825 sf
3-BR	950 sf	1050 sf
4-BR	1075 sf	1175 sf

# SECTION 2 / 1-3 FAMILY HOMES

HPD recognizes that the best design solutions for 1–3 family homes may require flexibility in size and minimum dimensions relative to larger multifamily buildings. Units in 1–3 family homes may deviate from the Guidelines in the following ways:

- The area of any individual room in a 1-3 family home may be as much as 10 sf less than the minimum required by the Guidelines.
- One minimum dimension (but not both) of any individual room in a 1-3 family home may be as much as 6 inches less than the minimum dimension required by the Guidelines.

Situations requiring special consideration beyond these allowances require advance notice to HPD Program project management and possibly a Design Consultation with HPD Program and BLDS.

Applicable accessibility requirements are outlined in the Accessibility section of this document and in greater detail in the *HPD Accessibility Guide*. However, please note that some of the requirements may have thresholds that affect how they are applied to smaller buildings. *New York City Building Code* defines a Multiple Dwelling as a building with three or more families living independently, while the *Fair Housing Act* applies to structures containing four or more units. Section 504 of the *Rehabilitation Act of 1973* applies to projects of five or more units: when projects involve multiple buildings, even if they are smaller, the statute would apply, and may require the designated mobility- and hearing/vision-impaired units to be located within smaller structures. In any scenario requiring accessible units, an accessible path to the ground floor must also be provided.

# **SECTION 3 / SUPPORTIVE HOUSING**

Supportive Housing is permanent, affordable housing with on-site support services to serve the needs of the most vulnerable New Yorkers, including homeless individuals and people with disabilities. Apartments are rent-stabilized and buildings are owned and operated by experienced community organizations that maintain a high standard of property management.

Projects are typically filed under R-2 Residential Occupancy Group

As per Department of Buildings Bulletin 2011-003, projects that contain a minimum of 60% Supportive dwelling units may be classified as Use Group III(A) buildings (Non-Profit Institution with Sleeping Accommodations). However, projects may contain a combination of Use Group III(A) and Use Group II (Residential).

Note that a 50-unit minimum is preferred for SHLP buildings.

HPD finances the construction of supportive housing through many loan programs including the Supportive Housing Loan Programs. Supportive housing may be included in any HPD loan program that includes a homeless set-aside.

- a. One dwelling unit must be provided on-site for a building superintendent as required by Housing Maintenance Code.
- b. Projects must provide community space for building residents and space for social services when appropriate.
- c. Security personnel must be present at all times.
- d. On-site support services that foster a sense of well-being and safety are required for all SHLP projects. These social service spaces should be located for ideal tenant engagement while also optimizing the proposed floor area for residential units.
- a. Program offices may have to be located in the basement due to the limited floor area.
- b. Natural lighting where physically and economically viable should be maximized so that offices are inviting for tenants and staff (possibly with lightwells). Program offices should also be carefully designed to ensure the privacy of the tenants.
- c. A multi-purpose room should also be located in high circulation areas for tenant engagement and have access to natural light. This room should be adaptive to various uses and accommodate different groups of tenants simultaneously.
- d. It is suggested that a common kitchen is also provided in this room as it is often a great way to bring people together with cooking classes, wellness seminars, and events around food. Other common spaces with less therapeutic functions, such as a laundry room, storage room, exercise room, etc. may be placed in the basement, or away from high circulation areas, as tenants will seek these rooms out if they need to.

REQUIREMENTS

REACH

# **SECTION 4 / SENIOR HOUSING**

Many adults prefer to live in their own home and community as they age, wishing to live safely, comfortably, and independently for as long as possible. The population of city residents who are at least 65 years old is projected to increase by 40 percent between 2010 and 2040. This means that we will need to house more than 400,000 additional seniors in the coming years. Our seniors are more likely to be low-income, to be rent-burdened, and to live on a fixed income than other city residents.

A 75-unit minimum is preferred for participation in HPD SARA Program. Projects may include studio and 1BR apartments.

Projects are typically filed under either:

Residential Use Group II Affordable Independent Residences for Seniors (AIRS), or Residential Use Group II, utilizing Quality Housing bonuses.

ZR23-23 requires that AIRS dwelling units have a minimum net area of 325 sf.

Projects should try to use a non-AIRS zoning designation for their required 30% homeless set aside, in order to potentially support a 55+ age restriction. This can be either UG II Income Restricted Housing Units (IRHUs) or, if the homeless units are supportive homeless units (15/15 or ESSHI), then UG III(A) units.

- a. One unit must be provided on-site for a building superintendent.
- b. Projects must provide community space for building residents and space for social services.
- c. Building must provide an emergency back-up power supply (e.g. back-up generator) and a Place of Refuge (see Resiliency Section 2.4 of this document).
- d. Handrails throughout the corridors (on both sides) must be provided.
- e. Bathrooms must be outfitted for the mobility-impaired use at the time of construction. Grab bars must be installed for all apartment bathrooms.
- f. Showers that are walk-in or no-threshold instead of bathtubs must be provided. Collapsible shower lips will be accepted only if they do not obstruct the required maneuvering clearances in the bathroom.
- g. Provide accessible appliances (self-cleaning ranges with front controls and accessible refrigerators) for all units.
- h. Provide hardware that is lever-type for doors, sinks, showers/baths, and toilets.
- i. Provide cabinets that are self-closing with D-type pulls.

CODE & ZONING

Note that these requirements apply to AIRS Dwelling Units regardless of HPD Program affiliation.

REQUIREMENTS

- a. The project should provide convenient, comfortable seating areas near the residential entry, situated to maximize views of outdoor activity and pedestrian areas.
- b. The social service area should be in a prominent location so that tenants are more likely to participate in events, programming, and services. Within the building, a high degree of social interaction should be encouraged, and community areas should be programmed to allow for a variety of activities.
- c. Circulation space throughout the common areas should comfortably accommodate occupants with limited mobility, including those using walkers, canes, and wheelchairs. Proposed furniture should facilitate senior use and be adaptive in terms of heights, angles, and appropriate clearances
- d. All floors should be slip-resistant. Soft, resilient interior flooring materials such as cork, rubber, or linoleum should be used throughout the building.
- e. Frequently used doors and passageways should be emphasized by the use of different colors and textures for guidance.
- f. Units should be designed to accommodate two persons.
- g. Provide light switches that are easily identifiable in the dark or illuminated.
- h. A master or three- way switch adjacent to the bed is suggested.
- i. Under-cabinet kitchen lighting should be considered.

# SECTION 5 / INCLUSIONARY HOUSING PROGRAM REQUIREMENTS

The Inclusionary Housing Program (IHP) is designed to preserve and promote affordable housing within neighborhoods where zoning has been modified to encourage new development. There are two types of Inclusionary Housing: voluntary and mandatory.

HPD's Voluntary Inclusionary Housing (VIH) Program was created in 1987 to encourage economically integrated communities and incentivize the creation or preservation of affordable housing in certain areas, including R10 districts Inclusionary Housing Designated Areas, and Special Districts. The program offers a density bonus for developments that provide permanently affordable housing. The bonus floor area generated by providing affordable housing can be used either on the bonus-generating affordable site or transferred off-site, within the same Community District as the bonus development, or within a half-mile. Additional information regarding the Voluntary Inclusionary Housing Program is available online at https://www1.nyc.gov/site/hpd/services-and-information/inclusionary-housing.page

HPD's Mandatory Inclusionary Housing (MIH) Program, created in 2016, requires a share of new housing in medium- and high-density areas that are rezoned to promote new housing production—whether rezoned as part of a city neighborhood plan or a private rezoning application—to be permanently affordable. The requirement applies to new construction developments with more than 10 dwelling units or an area greater than 12,500 sf. Additional information regarding the Mandatory Inclusionary Housing Program is available online at https://www1.nyc.gov/site/hpd/services-and-information/inclusionary-housing.page

For development proposals in the Mandatory Inclusionary Housing Program, BLDS reviews the project to verify compliance with Section 23-154 of the *New York City Zoning Resolution*. Refer to Chapter 41 of the Rules of the City of New York. In addition, projects are reviewed for compliance with accessibility regulations.

# SECTION 6 / INCLUSIONARY HOUSING DESIGN REQUIREMENTS

Projects that are developed under HPD's Inclusionary Housing Program must be designed in accordance with the requirements set forth in the New York City Zoning Resolution, Section 23-96, "Requirements for Generating Sites." This section describes requirements for unit sizes, vertical and horizontal distribution of affordable units, and proportion of affordable units to market-rate units. Information that demonstrates compliance with these requirements must be provided by the development team on the four charts described below.

# **6.1 CHART A: VERTICAL DISTRIBUTION**

For compliance with ZR 23-96 (b) (1). Inclusionary Housing Affordable Dwelling Units (IH Apartments) shall be distributed on a minimum of sixty-five percent (65%) of the residential floors.

#### **6.2 CHART B: HORIZONTAL DISTRIBUTION**

For compliance with ZR 23-96 (b) (2). VIH Apartments shall comprise not more than onethird (33.3%) of the apartments on each residential story of the generating site. However, on a residential story where there are fewer than three apartments, only one apartment may be a VIH Apartment, unless no less than one apartment on each floor is a VIH Apartment.

#### 6.3 CHART C: UNIT MIX (BEDROOM MIX)

For compliance with ZR 23-96 (c) (1) (i). IH Apartments shall contain a bedroom mix at least proportional to the bedroom mix of apartments in the generating site that are not IH Apartments.

-or-

For compliance with ZR 23-96 (c) (1) (ii) [for any mix of non-IH Units] not less than fifty percent (50%) of the apartments that are IH Apartments shall contain two bedrooms or more, and not less than seventy-five percent (75%) of the apartments that are IH Apartments shall contain one or more bedrooms.

-and-

For compliance with ZR 23-96 (c) (2) [for 100% IH standalone] where all of the apartments in a generating site are IH Apartments, not less than fifty percent (50%) of such IH Apartments shall contain two or more bedrooms and not less than seventy-five percent (75%) of such IH Apartments shall contain one or more bedrooms.

Be advised that the Horizontal Distribution requirement is not applicable to MIH stand-alone Projects and MIH Hybrid Projects.

#### Note that HPD

Inclusionary Program is requiring within 1% tolerance if using this Proportionality option. Deviations might be entertained in preference for larger family units, only at the written request and consent from HPD Inclusionary Program.

#### **6.4 UNIT SIZES**

For compliance with ZR 23-96 (d) (1). Minimum apartment sizes relative to the number of bedrooms are required for IH Apartments:

- 400 square feet of floor area for zero-bedroom (0-br) apartments
- 575 square feet of floor area for one-bedroom (1-br) apartments
- 775 square feet of floor area for two-bedroom (2-br) apartments
- 950 square feet of floor area for three-bedroom (3-br) apartments

For 100% Mandatory Inclusionary Housing with Market Rate units: Pursuant to the Average Unit Size requirement for Mandatory Inclusionary Housing of the latter part of ZR 23-96(d) (1), 100% of the affordable units of all varied bedroom counts must be equal or greater than the average size of dwelling units that are non-Inclusionary Housing units (Market Rate) with the same number of bedrooms. Unit Size Charts must be detailed adequately to show net square footages of all proposed units, including apartment distribution totals for Inclusionary and non-Inclusionary units, with their corresponding average unit sizes.

#### 6.5 PROPORTIONALITY OF SECTION 504 UNITS

BLDS requests that the Section 504 apartments be distributed proportionally across all affordability brackets, to include both Inclusionary and non-Inclusionary apartments. See following calculations for example only:

45 MIH / 200 Total DU = 22.5% "Mobility Impaired" (5% = 10 required) MIH: 10 x .225 = 2 min. is required Non-MIH: 8 max. is suggested "Audio/Visual Impaired" (2% = 4 required) MIH: 4 x .225 = 1 min. is required Non-MIH: 3 max. is suggested

#### **6.6 BUILDING PLANNING**

The configuration of a building determines how its unit distribution and unit mix will be analyzed for compliance with unit distribution and unit mix requirements pursuant to Section 23-90: *Inclusionary Housing Program* of the *New York City Zoning Resolution*. Following are various building configurations with the quantity and types of distribution and unit mix charts required for Design Review submissions:

# A BUILDING CONSISTING OF A SINGLE TOWER WITH ONE MAIN RESIDENTIAL ENTRANCE

One (1) Chart A, Vertical Distribution One (1) Chart B, Horizontal Distribution One (1) Chart C, Unit Mix One (1) Unit Size Chart

ote: Projects with mixture of IH and ther affordable units omplying with the nit sizes specified this document nay receive a waiver rom the Inclusionary lousing Program size equirements.

# A THROUGH-LOT BUILDING CONSISTING OF TWO TOWERS CONNECTED AT THE FIRST FLOOR WITH OR WITHOUT SEPARATE RESIDENTIAL ENTRANCES

Each tower forms the street line for its respective street and is separated above the first floor by a courtyard and open space. Corresponding residential stories (floor to ceiling heights) at each tower may or may not align. IH Apartments are located in each tower.

One (1) Chart A, Vertical Distribution, for each tower One (1) Chart B, Horizontal Distribution, for each tower One (1) Chart C, Unit Mix, for the total building One (1) Unit Size Chart

# A BUILDING CONSISTING OF MULTIPLE BUILDING SEGMENTS OF WHICH ONE BUILDING SEGMENT IS DESIGNATED WITH ALL IH APARTMENTS

One (1) Chart A, Vertical Distribution, for the building segment with the IH Apts. Chart B, Horizontal Distribution, is not applicable because the total building segment is designed with IH Apts. One (1) Chart C, Unit Mix, in compliance with *ZR 23-96 (c) (1) (ii)* for the building segment with all IH Apts. One (1) Unit Size Chart

Note: The above information shall not be construed to limit the number and / or type of unit distribution and unit mix charts that may be required or requested for the review and processing of an Inclusionary Housing Program project application.

- Common laundry facilities must be provided if individual apartment washer / dryers units are not provided.
- Parity must be achieved when providing building amenities and determining the use of such spaces by residents of the Inclusionary Housing units.