

# Integrated Physical Needs Assessment (IPNA) Standard

*for New York City and State Low/Moderate Income Multifamily Buildings*

**Recognized by:**

- NYS Homes and Community Renewal (HCR)
- NYC Department of Housing Preservation Development (HPD)
- NYC Housing Development Corporation (HDC)

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Current Version Description of Revisions  
 (Please see Appendix C for all previous revisions)

<b>Date Updated</b>	<b>Version</b>	<b>Section</b>	<b>Description of Change</b>	<b>Page Number</b>
3/1/2024	4	Assessor Qualifications- Energy Assessor	Pre-requisite for energy assessor adjusted to include NYSERDA FlexTech Consultants.	Page 7
3/1/2024	4	Scope of Work to Create an IPNA Report	Reports to include a table of contents, page numbering, defined sections.	Pages 10
3/1/2024	4	Minimum Sampling Requirements	Adjusting language to require the inspection of all non-apartment areas for projects with multiple buildings.	Pages 12-13
3/1/2024	4	Other	Added information about compatibility with NYSERDA FlexTech Program	Page 14
3/1/2024	4	Solar Screening Results	Revised solar summary references and tab description. Also, clarification it only needs to be completed by HPD projects where a roof replacement or significant roof repairs are indicated.	Page 16-17
3/1/2024	4	IPNA Template	Added details about the Project Summary Sheet (PSS) section	Page 20
3/1/2024	4	Appendix B	Update of sampling examples for multiple building projects to include minimum sampling requirement adjustments.	Pages 25-28

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## INTRODUCTION

The emergence of concerns about climate change and the associated need to reduce carbon emissions has given a new and significant urgency to energy efficiency work in buildings. As a result, a trend has developed to merge PNAs with energy audits, sometimes referred to as a Green PNA, or GPNA.

Physical needs assessments (PNAs) have long been used to assess deficiencies in a building or group of buildings, to recommend improvements to remediate these deficiencies, to estimate the cost of such work, and to recommend timing for various elements of the work depending on their urgency.

In parallel, energy audits have been developed in recent decades to identify deficiencies in energy systems as well as opportunities to remediate these deficiencies and reduce energy use and costs. In many ways, energy audits are similar to PNAs, although they add the metrics of energy use and projected energy cost and use savings and are limited to energy systems (although frequently water, as well).

The potential benefits of a merged report include reducing duplication of effort; reaching economies of scale in planning capital improvements and energy efficiency work simultaneously; and leveraging and coordinating various financing sources. Traditional PNAs offer many benefits that are not typical of energy audits, including the ability to prioritize tasks, undertake long-term planning, and reduce construction costs by timing energy improvements with the end of the useful life of energy systems. Likewise, energy audits offer benefits to traditional PNAs, including the ability to leverage cost savings to help pay for the work and the potential to increase the amount of financing available through underwriting to efficiency savings.

However, while GPNAs are useful in identifying both the physical and energy deficiencies in buildings, they are typically not comprehensive enough to identify housing-based health issues that have immediate impacts to residents' health and comfort. Therefore, this new Integrated Physical Needs Assessment (IPNA) takes the GPNA a step further to not only merge a traditional PNA with an energy audit, but to also more intentionally identify housing-based health issues that can be addressed during rehabilitation or through operations and maintenance. Incorporating a health lens into the IPNA will make it easier for building owners to make health-promoting improvements in broader rehabilitation projects, such as measures to improve ventilation; the use of low- or no-VOC materials; and the adoption of Integrated Pest Management practices and "green cleaning" regimes.

In addition to incorporating a health lens, the IPNA includes a solar screening that takes basic information about the building and estimates how much it would cost to install a solar photovoltaic (PV) system on the roof and how much electricity such a system might be expected to produce. This information can be easily used by building owners to determine if solar PV is an opportunity that they should investigate further. Note that at this time, the Solar Screening Results only work for buildings located in NYC.

We expect the IPNA might evolve further over time to incorporate information for building owners on additional topics. For example, a possible resiliency component has been discussed. Resiliency is an important consideration for building owners across the state as weather events become more severe.

While there are many benefits to merging energy audits and health assessments with PNA's, there are also complications and questions. What qualifications are required for the work? Can one consultant do all the work? How can an energy audit report, health assessment and PNA report be effectively integrated? What standards should be used?

This document seeks to address the complications and questions of integrating energy with traditional capital needs assessments. Additionally, it includes resources and tools to assess opportunities to create healthier living environments and to install on-site electricity generation. Both this document and the accompanying IPNA tool will receive an annual review to capture any updates or changes.

Please ensure that your project adheres to the relevant Sustainability Guideline based on Agency requirements:

- [HCR Sustainability Design Guidelines: Existing Buildings](#) HCR Sustainability Design Guidelines: Existing Buildings
- [HCR Design Guidelines: Appendix A \(Preservation Standards\)](#)
- [HPD Design Guidelines for Preservation](#)

## GOALS AND OBJECTIVES FOR THE IPNA

### Long-Term Goal

Ensure every owner of an affordable multifamily building in New York City and State who accesses federal, state, or municipal financing for rehabilitation work incorporates cost-effective energy efficiency, water conservation, and health-related improvements into their capital planning process to enhance the health, safety, and comfort of residents, reduce maintenance and operating expenses, and reduce energy use and greenhouse gas emissions.

### Short-Term Goals

Ensure every owner of an affordable multifamily building in New York City and State who accesses federal, state, or municipal financing for rehabilitation work uses a standardized process for evaluating potential energy efficiency, water conservation, and health-related improvements as part of their capital planning process; ensure that the IPNA evaluation is accepted by all efficiency program administrators and lenders as a valid means of identifying measures and estimating savings; and ensure that the IPNA can be used to comply with New York City and State energy audit regulations.

## DEFINITIONS

***Physical Needs Assessment (PNA)*** – An evaluation of a building’s physical condition, including identification of deficiencies, recommended improvements (scope of work), and associated construction costs for those improvements. Also called a ***property condition assessment (PCA)***, ***capital needs assessment (CNA)***, ***condition survey***, or ***project capital needs assessment (PCNA)***.

***Integrated Physical Needs Assessment (IPNA)*** – A physical needs assessment that includes energy, water, and health assessments, including identification of deficiencies, recommended improvements (scope of work), and associated construction costs for those improvements.

***IPNA Management Committee*** – Organizational body that is comprised of affordable housing agencies that support IPNAs: New York City Department of Housing Preservation and Development (HPD), New York City Housing Development Corporation (HDC), and New York State Homes and Community Renewal (HCR). The Management Committee deliberates on IPNA matters, including updates to the tool and standard, training opportunities and maintains a list of pre-qualified firms.

**Energy Assessment** – An evaluation of a building’s energy and water consumption patterns, including identification of deficiencies, recommended improvements (scope of work), and associated construction costs for those improvements. An energy assessment also includes projected annual energy use and cost savings for each improvement and billing analysis. Also called an **energy audit**.

**Energy Assessor** – A firm or individual qualified to perform the energy/water assessment portion of an IPNA; also called an **energy auditor**.

**Needs Assessor** – A firm or individual qualified to perform the physical needs assessment portion of an IPNA.

**Scope of Work** – A written description of recommended capital, energy, and health improvements needed in a building. Recommendations are classified by their urgency: critical, short-term, or long-term.

**Construction Cost** – the cost to implement a building improvement, including both material and labor costs and related soft costs such as design and permitting. Also called **capital cost**, **first cost**, or **installed cost**.

## ASSESSOR QUALIFICATIONS

### Needs Assessor

At least one member of the Needs Assessor team shall be a registered architect (RA) or professional engineer (PE) and have a minimum of three years of relevant work experience. At a minimum, this professional shall review and approve the Needs Assessment portion of the report.

*Background: This is consistent with the requirements of the HPD/HDC GPNA, which requires the professional designation. The HUD C.N.A. refers to the ASTM standard, which recommends a professional designation in architecture or engineering, although it is not mandatory. The 3 years is a requirement we added to be consistent with the Energy Assessor. The “review and approve” is from the ASTM standard.*

### Energy Assessor

At least one member of the Energy Assessor team shall have one of the following certifications, as well as a minimum of three years of relevant work experience.

- AEE Certified Energy Manager (CEM)
- AEE Certified Energy Auditor (CEA)
- AEE Certified Measurement and Verification Professional (CMVP)
- BPI Multifamily Building Analyst (MFBA)
- ASHRAE High-Performance Building Design Professional (HPBDP)
- ASHRAE Building Energy Assessment Professional (BEAP)
- RESNET HERS

At a minimum, this professional shall review and approve the Energy Assessment portion of the report. The Energy Assessor should also be a firm in the [Multifamily Building Solutions Network](#) or [FlexTech Consultant](#) list of New York State Energy Research and Development Authority (NYSERDA), where applicable.

*Background: HPD/HDC's GPNA, NYSEDA, ASHRAE Level II, and the HUD C.N.A. all have a mix of these certifications. The HUD C.N.A. allows almost all of them (with the exception of CMVP and BEAP, both of which are referenced in ASHRAE Level II). The only standard included here that is not among those listed as an option for NYC LL87 is AEE's CMVP. The requirement for 3 years of relevant work experience is from the HUD C.N.A. and seems like a good requirement. The "review and approve" was added to be consistent with the Needs Assessment, and it also seems consistent with NYSEDA which requires that the certified professional "conducted or supervised" the applicable work.*

Please see Appendix A for a comparison of the acceptable requirements for the Needs Assessor and the Energy Assessor.

## Statement of Qualifications and Experience

The IPNA Management Committee will issue a request for qualifications (RFQL) every year to determine a list of pre-qualified firms capable of performing IPNAs. Respondents to any RFQ for IPNA services in compliance with this standard must provide the following information, and must include information for each subcontractor consultant participating in the team:

1. **Relevant Experience and Case Studies:** Describe experience and provide three (3) case studies of projects that demonstrate experience of the consultant team in the following areas:
  - i. Performing comprehensive building capital needs assessments and energy / water audits, including recommending scope items for overall building capital needs and energy efficiency / water conservation (EEWC) measures, and health-related measures when applicable. Please include a sample physical needs assessment and energy audit or integrated physical needs assessment report;
  - ii. Conducting energy savings analysis and cost estimates for recommended capital needs and EEWC measures (include methodology for determining projected savings and cost estimates);
  - iii. Creating scopes of work, plans and specifications for rehabilitation projects. Please include a sample scope of work of a building(s) requiring both capital and energy upgrades (if available, please provide a scope of work that would allow an owner to achieve compliance with LL97 performance standards). Include the resultant reduction in water/energy consumption from the recommended capital and EEWC measures for properties that pursued the recommended scope of work;
  - iv. Participating in or overseeing the contractor bid process for a construction project, including analyzing contractor bids and cost proposals;
  - v. Managing construction timelines and coordinating contractors, owners, and lenders, including reviewing and submitting requisitions and working with servicers;
  - vi. Making recommendations for operations and maintenance best practices to achieve energy and water efficiency and healthy homes objectives, and training staff, building owners, and residents;
  - vii. Performing post construction measurement and verification for implemented EEWC measures;
  - viii. Some familiarity with flood plain management standards.
2. **Personnel Qualifications and Resumes:** Provide an organizational chart listing all personnel who will be performing and overseeing each component of the scope of services. In cases of a multidisciplinary team, identify the point of contact who will be responsible for management of the



overall team. Also list the accreditations of each participating team member. The Needs Assessor and Energy Assessor must have the credentials listed in the IPNA Standard in order to be eligible. The Energy Assessor must be an approved Provider in NYSERDA's [Multifamily Building Solutions Network](#) or [FlexTech Consultant](#) list. If an Energy Assessor candidate is not an approved Provider in one of these NYSERDA networks at the time of submitting a proposal, they could receive conditional approval. The consultant will have 90 days to become an approved Provider in the NYSERDA [Multifamily Building Solutions Network](#). Until that approval is achieved, the firm will not be allowed to complete IPNA work.

3. **List of References:** Include at least three client references for similar projects, for each individual or firm.
4. **Statement of Good Standing:** State whether your firm is in good standing with all divisions of City, State and Federal Government. And, if not, describe any outstanding issues in detail, including any unpaid taxes or fees owed to any governmental authority. State whether the firm, or any of its employees, or anyone acting on its behalf, has ever been convicted of any crime or offense arising directly or indirectly from the conduct of the firm's business, or if any of the firm's officers, directors or persons exercising substantial policy discretion have ever been convicted of any crime or offense involving financial misconduct or fraud. If so, please describe any such convictions and surrounding circumstances in detail.

### ***Additional Documentation***

The Respondent must include the following additional documentation:

1. **Insurance:** Proof of Professional Liability Insurance, as well as Worker's Compensation and Employers Liability Insurance.
2. **Disclosure and Conflict of Interest Forms:** Forms are required for the firm itself, its employees, and anyone acting on its behalf.
3. **Fee Proposal:** Pricing is for informational purposes only at this time. Use the provided Fee Proposal sheet (Part C) to provide cost estimations for the IPNA and TA Services. For multidisciplinary teams, ensure the fees quoted on the Fee Proposal sheet are aggregated and include the costs associated with each consultant. Supplemental information for fee proposals and/or alternative fee structures may be included in addition to the provided form. Please include relevant assumptions for fee proposals and provide all assumptions used in calculating the fee proposal in the Notes section. A range of costs for each item may be included, however please include an explanation for the range in the Notes section. If the proposed pricing structure differs from your standard, an alternative pricing structure proposal may also be included in the Notes section in addition to the requested pricing structure.
  - **Integrated Physical Needs Assessment:** Provide fee proposal for the scope of services contained in Part C. Fee proposals should be differentiated for small- to mid-sized buildings smaller than 50,000 square feet and large buildings over 50,000.
  - **Technical Assistance Provider:** Provide fee proposal for the scope of services contained in Part C. Fee proposals should be provided for each scope item and differentiated for small- to mid-sized buildings smaller than 50,000 square feet and large buildings over 50,000.

Incumbent providers must update relevant information on an annual basis to retain their listing as "Pre-qualified Firms". This information includes submitting any changes to organizational charts,

accreditation, resumes, insurances, and fee proposal sheet. The IPNA Management Committee may request additional information to ensure up-to-date records.

## IPNA REQUIREMENTS

### Guidance and Standards

The IPNA is to be performed with adherence to generally-accepted industry standards for property condition assessments and energy audits. Additionally, the following standards should be used as guidance:

- **Needs Assessments** should broadly follow ASTM E2018-15 *Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process*
- **Energy Assessments** should broadly follow the *ANSI/ASHRAE/ACCA Standard 211, Standard for Commercial Building Energy Audits* (2018 or most recent version, if published) Level II and the IPNA Guidelines. If ASTM E2018-15 or ASHRAE Level II conflicts with the IPNA Guidelines, the IPNA Guidelines should be followed. If ASTM E2018-15 and ASHRAE Level II requirements conflict, ASHRAE Level II should be followed.
- **Healthy Home Assessments** should broadly follow the health inspection guidance in the IPNA.
- **All Projects** should use the Fannie Mae Estimated Useful Life tables for Multifamily Properties (<https://multifamily.fanniemae.com/media/document/pdf/appendix-f-estimated-useful-life-tables>) for improvements that are covered by the Fannie Mae tables. For measures that are not covered by those tables, estimated useful life should be taken from another authoritative and independent source.

### Capital Needs to Review

The following capital needs shall be considered when preparing the IPNA:

- **Critical Needs:** Health and safety deficiencies; open Building Code or Environmental Control Board (ECB) violations; Housing Maintenance Code (HMC) violations in Hazard Categories ‘B’ and ‘C’; friable asbestos containing materials, and any Lead-Based Paint conditions that require immediate remediation to meet City, State, or Federal requirements.
- **Short-Term Needs:** An estimate of entire system or component replacement items, and significant deferred and other maintenance items that will need to be addressed within three years, including cost effective measures that will reduce energy and water consumption and create healthier living environments.
- **Long-Term Needs:** An estimate of entire system or system replacement items beyond the third year that are required to maintain the development’s physical integrity and reduce energy and water consumption through year 20.

### Scope of Work to Create an IPNA Report

The deliverable shall consist of both a completed IPNA Template and written Report. The Report shall identify physical deficiencies, repair/replacement needs, and energy/water inefficiencies, pest activity, moisture and ventilation issues, and any other applicable health

hazards determined. The Report shall have a table of contents, page numbers, and numbered sections, which include:

1. Visual Survey from basement to roof, including, but not limited to:

- Site, public elements, and common areas
- Structural frame and building envelope
- Insulation and roof/wall cavities
- Mechanical, electrical, and plumbing systems and utilities
- Life safety/fire protection equipment
- Interior elements

To encourage integration and to avoid a duplication of effort, we propose that the Needs Assessor conduct all aspects of the visual survey inspection other than the following energy-related components, which should be conducted by the Energy Assessor: Heating, cooling, ventilation, insulation, infiltration, windows, lighting, appliances, hot and cold water systems and fixtures.

2. Review of Pertinent Documentation, including, but not limited to:

- Violations issued by City and State agencies
- Certificate of Occupancy
- Architectural drawings
- Maintenance logs
- Operations and Maintenance (O&M) plans
- Pest control contracts or policies
- Certificates of training for building maintenance staff

The Needs Assessor should review the pertinent documentation. The Energy Assessor may also review the architectural drawings.

3. Review of Energy and Water Consumption Data

- 24 months of consecutive energy and water billing statements
- Benchmarking Data: note that if automated benchmarking is not already in place, the IPNA provider should work with the building owner and/or staff to set up automated benchmarking using the approved HDC/HPD benchmarking provider list.

The Energy Assessor should complete the review of the energy and water consumption data.

4. Diagnostic Testing and Systems Inspection, including, but not limited to:

- Carbon monoxide (in all areas with combustion equipment, including appliances and heating equipment; for heating equipment, testing shall include in flues and in the mechanical room; for forced air equipment, testing shall include in the supply air)
- Natural gas leaks
- Moisture (relative humidity), in areas of concern, such as where there is visible mold
- Boiler efficiency
- Indoor air temperature: measure a representative set of indoor temperatures, for example including upper floors and lower floors; also record thermostat setpoints and schedules (if programmable).
- Ventilation airflow and fan power: for buildings with ventilation systems that operate 24/7 AND in buildings that are high energy users (site EUI over 150 kBtu/SF/year), these must be measured. In other buildings, results can be estimated.

The Energy Assessor should conduct all the above testing and inspections.

## Minimum Sampling Requirements

### *Apartment Inspections*

This survey must include the inspection of at least 3 units or 10% of the total project's dwelling units, whichever is greater. For projects with over 200 units, the inspection is capped at 20 units. The 10% calculation should always be rounded up, so for example, 10% of a building with 31 units is 3.1, which is rounded up to 4 units required for inspection.

The consultant should identify units to include in this sample that contain varying characteristics and conditions that will affect the report, including location (ground floor, top floor, basement, exposed edge and corner units) as well as type, size (number of bedrooms), and history of rehabilitation. When more apartment characteristics exist than can be covered by the 10% sample size, the consultant does not need to increase the minimum sample to cover one apartment of each type. The consultant should aim to cover as many of the various characteristics using the 10% sample as possible.

For example, in a 22-unit building, a minimum of 3 apartments must be inspected.

- If all the units have one bedroom, and some are in the basement, the selected units should include one on the top floor, one on the bottom floor, and one in the basement.
- If the building was previously renovated in two distinct phases, a minimum of 3 units must still be inspected. They should be selected to include at least one from each phase of renovation, and also from various locations throughout the building (e.g. one from the top floor that was renovated in the first phase, one from the bottom floor that was renovated in the second phase, and one from the basement).
- If the building has 21 one-bedroom units and one 2-bedroom unit, a total of 3 units should still be inspected: the 2-bedroom unit and two 1-bedroom units. Ideally between those three units, one should be located on each of the following floors: top floor, bottom floor, and basement; and at least one apartment should have been renovated in each of the two renovation phases.

Note that if the results of the initial minimum sample are inconsistent, additional units should be inspected. For example, if three units are sampled and two of the refrigerators are newer while one is older, additional units should be sampled until the assessor has confidence in the distribution of new and old refrigerators.

### *Multiple Building Projects*

For HPD, HDC, and HCR projects with multiple buildings, clusters of buildings that are similar in design, construction, heating systems, age, and history of rehabilitation may be grouped into Building Types and may not need to have apartments in every building inspected. The proposed sampling method must be approved by applicable agency program staff\* prior to the date of the inspection to confirm whether it is suitable for the project. If approved, the survey must include the following:

1. The inspection of the non-apartment areas of all of the buildings, including but not limited to: common areas, exterior spaces, mechanical spaces, community and commercial spaces, parking lots, garages, and connected structures. Sampling does NOT apply to the physical needs assessment (threats to health and safety, non-energy/water maintenance issues, and material building code violations) or to the collection and analysis of owner-paid utility bills for non-apartment areas of the building; these common area bills must be collected and analyzed for 100% of the buildings in the project.
2. The inspection of a minimum of 10% of the total number of apartments in each Building Type, to a maximum of 20 apartments per Type, following the guidelines laid out in the Apartment Inspections

section above. The sampling should evenly assess each building in a manner that best captures the varying conditions and characteristics of the project.<sup>1</sup>

A sample of apartment bills may be collected for analysis following the Apartment Inspections guidelines above.

\*Please note that a project's sampling request must match the format in Appendix B.

The IPNA Template is designed to be flexible and could be used for a project with one building or a project with multiple buildings. If an IPNA Template is used for a project with multiple buildings, the buildings must be the same building type per the IPNA Standard guidance (refer to Appendix B) and the scope of work for those buildings must be the same across the multiple buildings. If a project consists of multiple buildings with multiple building types, a separate IPNA Template must be filled out for each building type. Furthermore, if within a building type, buildings will have significantly different proposed scopes of work (e.g., electrification of some but not all buildings), a separate IPNA Template must be filled out for each separate scope of work. In the final IPNA submission, it must be clear which buildings are covered within each IPNA Template and the IPNA Provider must confirm that the buildings within a given IPNA Template are the same building type and have the same scope of work.

## Energy Assessment Requirements

This section of the IPNA report should be completed by the Energy Assessor. The energy audit should broadly follow the *ANSI/ASHRAE/ACCA Standard 211, Standard for Commercial Building Energy Audits* (2018 or most recent version, if published) Level II and the IPNA Guidelines, as well as these IPNA Guidelines.

An analysis of the building's pre-retrofit performance shall be completed using 24 months of utility data, initial inspection data, and diagnostic data collected during the on-site visits. The analysis should estimate annual energy and water consumption and the cost savings of potential improvements. Current operating schedules that have been verified on site are to be used for energy and water cost savings estimates.

The energy and water audit shall consist of the following components:

1. The building description (inspection of energy and water systems). The focus of this component is the building's current condition.
2. Energy and water use. The focus of this component is both the preliminary analysis (current energy and water use) and the projected energy and water use after improvements are made. The purpose of the projected use estimates is to show potential overall energy savings and to provide post-retrofit operating costs that can be used in financial pro-formas. Document billing data for twenty-four (24) months of consecutive energy and water utility bills, provide an energy utility use breakdown, and calculate the Energy Use Intensity (EUI) kBTU/sf/year.

Energy Assessors are urged to include both low-cost/no-cost improvements and larger energy improvements. Energy assessments for buildings subject to Local Law 97 (refer to "Compatibility with NYC Local Law 97") should reduce energy intensity in accordance with LL97. For buildings outside of NYC and therefore not subject to LL97, energy assessments shall identify a minimum of 20% energy

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<sup>1</sup> For certain projects with a large number or unique population of buildings, the agencies may approve a sampling of non-apartment areas if a reasonable case can be made by the Provider.

savings and are urged to identify deeper energy savings beyond 20% savings to meet long-term state carbon emissions goals.

Hourly energy models are not required, but interactive energy calculations must be performed. A basic model of the project's energy use should be created. The historical energy bills (as summarized on the Energy and Water Use tab) should be used to true-up the energy model and to ensure that the consumption of each component of the building is reasonable. For example, billing data for the heating fuel should be disaggregated into heating and hot water consumption. Then the fuel consumption of the boiler system should be estimated and compared to the disaggregated estimates from the bills. The model must show *equal or less* total energy use than the actual bills and should also be within 10% of the actual total billed consumption for all energy types.

In addition to energy, water conservation options shall also be evaluated. At a minimum, evaluate shower heads, bathroom faucets, and toilets to meet the EPA WaterSense standard. Inspect for evidence of leaks, such as in boiler rooms, below kitchen and bath sinks, and in toilets. Inspect bathtub faucets to see if water flows out of the bath spout when the shower is on. Make recommendations to remediate any leaks.

### Assessment of Potential Health-Focused Improvements

The IPNA encourages assessors to consider how physical and capital upgrades could improve occupant health. It contains several tools to help assessors make this determination as they complete the IPNA and develop a Scope of Work and preliminary cost estimates, noting the potential of each upgrade to improve occupant health. The relevant health tabs in the spreadsheet are described below.

- **Inspection – Physical Needs Tab** contains two boxes, “Health-Related Concerns” and “Health-Related Concerns in Apartments”, that call out potential health-related concerns, in categories that align with the headings in the “Healthy Rehab Interventions” tab. Inspectors are expected to summarize potential health issues that could be addressed in an upgrade.
- **Scope and Preliminary Cost Estimates Tab** includes a column to allow the assessor to indicate if each item could potentially benefit tenant health outcomes. Inspectors can use the “Healthy Rehab Interventions” tab as guidance to understand the potential health outcomes of various capital interventions when making this determination.
- **Operations and Maintenance Tab** identifies property management practices that can improve occupant health; this information may be useful to share with owners.
- **Healthy Rehab Interventions Tab** identifies building renovation work that can improve occupant health. This information is intended to help assessors in determining if a proposed capital upgrade has the potential to improve occupant health, as requested in the “Scope and Preliminary Cost Estimates” summary tab.
- **Health Questionnaire Tab** identifies building areas to investigate during the building walk through to better understand potential health opportunities. It is presented as guidance to help inform assessor activities and inspections.

**NOTE:** Other than the “Scope and Preliminary Cost Estimates” Tab, none of the other health-related tabs are required to be filled out by the inspector. They are included to help assessors in considering the potential health concerns and providing useful information to owners and funding agencies.

## INTEGRATION

We recognize that an IPNA will typically be performed by two different professionals, a Needs Assessor and an Energy Assessor, that will be recognized as one approved entity. The IPNA is intended to support



these separate efforts by clearly defining the responsibilities of each. However, it is important that duplication of effort be avoided and that the final IPNA presents an integrated whole. To do this, the following steps should be taken:

1. The Needs Assessor and Energy Assessor are encouraged to conduct the site visit together, on the same date, to share observations.
2. One firm should perform the final review and release of the IPNA submission. That firm should hold ultimate responsibility for the report.
3. An executive summary shall present the results of both the energy audit and the needs assessment in one table.
4. The building description shall be integrated into one section, although different pieces are assigned to the Needs Assessor and to the Energy Assessor.

## OTHER

### Shelf Life

An IPNA can be used for funding purposes up to two (2) years from its release date.

### Compatibility with Agency Design Guidelines

HPD has recently released their [Preservation Design Guidelines](#), HDC has released their Sustainability Guidelines for Existing Buildings, and HCR has recently released the 2023 version of Sustainability Guidelines for Existing Buildings and HCR Design Guidelines – Appendix A (Preservation Standards). Projects must comply with the mandatory provisions of the applicable agency guidelines, except where Design Waivers are allowed and approved by the applicable agency.

### Compatibility with NYC Local Law 87

The requirements for an IPNA and a Local Law 87 energy audit are similar but not exactly the same. This section reviews the differences between them to make it easier for Providers who are working with buildings that need both reports completed at the same time.

Local Law 87 in New York City requires energy audits and retro-commissioning every 10 years. For more information on LL87, please visit <https://www1.nyc.gov/html/gbee/html/plan/ll87.shtml>.

The general requirement for the level of energy audit (ASHRAE Level II) is the same for the IPNA as for New York City's Local Law 87 (LL87). However, Local Law 87 applies only to buildings over 50,000 square feet while the IPNA can be used for buildings of any size.

Professional qualifications required to perform a LL87 energy audit are the same as those required to perform the energy/water portion of the IPNA, with the exception that the IPNA allows AEE's CMVP certification, whereas LL87 does not.

Important note: Please be aware that a LL87 energy audit will not be sufficient to meet all the requirements for the IPNA. For example, the IPNA requires that minimum energy savings be identified, but there is no minimum savings required by LL87. Conversely, the LL87 energy audit requires some data that is not required by the IPNA. If you are completing an IPNA and a LL87 audit for the same building, make sure that you obtain all the data required for both reports when you do your field visit.

## Compatibility with NYC Local Law 97

Local Law 97 (LL97) was passed in 2019 as part of the Climate Mobilization Act. The legislation applies to buildings 25,000 square feet and larger. The legislation requires that covered buildings meet increasingly more stringent emissions limits. The energy assessment for the IPNA shall be used to inform compliance with LL97 emission targets. The emission limits for LL97 are included in the IPNA Template.

Buildings that include affordable and rent-regulated housing are not exempt from the requirements of Local Law 97 but may be treated differently under the two articles that make up the law as outlined in Title 28 of the NYC Administrative Code. Please click here for [HPD/DOB's Local Law 97 Guidance for Affordable Housing](#).

## Compatibility with NYC Local Laws 92 and 94

Local Laws 92 and 94 of NYC (LL92/94) require that the roofs of certain buildings be covered by green roofs or solar PV systems. New construction and substantial renovations are required to install solar PV, green roofs, or both provided that they do not meet one of the exceptions. The IPNA requirements do not mandate compliance with LL92/94, but substantial renovation to a roof should consider the need for solar PV, green roof or both. For more information on LL92 visit [https://www1.nyc.gov/assets/buildings/local\\_laws/ll92of2019.pdf](https://www1.nyc.gov/assets/buildings/local_laws/ll92of2019.pdf). For more information on LL94, visit [https://www1.nyc.gov/assets/buildings/local\\_laws/ll94of2019.pdf](https://www1.nyc.gov/assets/buildings/local_laws/ll94of2019.pdf).

## Compatibility with NYSERDA FlexTech Program

Costs associated with energy assessment/audit aspects of this report may be eligible for a cost-share incentive through this program. Please see resources on [NYSERDA's FlexTech Program](#) page for more information on the FlexTech Program. Alignment information can be found in the [FlexTech and IPNA Alignment Factsheet](#) and the [FlexTech and IPNA Process Alignment for Building Owners](#).

## THE IPNA TEMPLATE

Firms must use the Excel-based IPNA Template and must submit the template with the written IPNA report. Note, a single project may have multiple IPNA Templates depending on the building types and/or scopes of work associated with the buildings covered in that project. All IPNA Templates must be submitted along with the IPNA Report. For a project with multiple buildings, the IPNA Templates and IPNA Report must clearly identify which buildings are associated with which IPNA Template and the IPNA Provider must confirm that each IPNA Template consists of buildings with the same building type and the same scope of work. Energy and water components are integrated in the executive summary, the inspection report, and the energy and water audit. The executive summary shall also note opportunities to create healthier living environments. Each of the tabs in the IPNA Template are described below. The tabs Executive Summary, Energy and Water, Scope and Preliminary Cost Estimate, and Replacement Cost Schedule all have duplicate tabs that have been formatted for printing. Those print tabs could be used to copy the data in a print-friendly and/or pdf format for the IPNA Report submission.

## Objective and Limitations

Describe the objective of the IPNA. Outline the procedures used in producing the report, as well as any limitations of the report. Boilerplate objective, procedures, and limitations are provided. The assessor can edit as appropriate.



## Cover Page

Insert a photograph of the building and your company logo. This will be the first page of the report when it is printed as a pdf or hard copy.

## Executive Summary

The information on this tab includes bottom-line information sought by lenders and grant-making agencies.

Identify the project, list for whom the report was prepared, and name the primary personnel who created the IPNA report and completed the IPNA Template.

The table on this tab should summarize *all* the recommended physical needs, energy, and health-related improvements, including their estimated implementation costs, annual utility cost savings if applicable, and level of urgency (critical, short term, or long term). This executive summary table is an important part of presenting the IPNA in an integrated form.

## Executive Summary Cont'd

Summarize the existing conditions of each major element of the property in the table at the top of this tab. Then give a written description of the maintenance practices at the property, the existing accessibility to the property by people with disabilities, and any open violations.

The Implementation section at the bottom of this tab lists a variety of resources that may be useful to building owners and project developers as they implement the recommendations in this report.

Finally, this tab summarizes the proposed division of work between the Needs Assessor and the Energy Assessor. Any changes to those responsibilities should be recorded on the Executive Summary Cont'd tab.

## Building Info

Provide information on the location of the building and any special characteristics, such as landmark buildings or historically contributing buildings in historic districts.

Fill out the table of the number of units of each type that are occupied and vacant.

Finally, populate the table of open violations with the requested information. The estimated cost to remediate each violation should be included.

For multiple-building projects, the building information should be shown on a per building basis.

## Inspection – Physical Needs

This tab should be completed by the Needs Assessor. Describe the property's exterior and interior physical condition. Use the text boxes to describe any needed upgrades and improvements. The report should identify, in detail, any deficient or deteriorated items that represent an immediate threat to health and safety. Additionally, the report should describe all other physical deficiencies including significant defects, items of deferred maintenance, and material building code violations that would limit the expected useful life of major components or systems.

The inspection report shall contain a description of the inspection of following areas of the building:

- Site
- Structure
- Roof
- Exterior Structures

- Exterior Doors
- Interior Common Area, including the electrical system (except lighting) and any health-related issues
- Apartments, including the electrical system (except lighting) and any health-related issues
- Plumbing System
- Electrical System (except lighting)
- Elevator
- Fire Protection
- Compactor
- Security
- Utility Areas
- Other Building Systems
- Special Considerations, including:
  - Environmental Issues
  - Asbestos Containing Materials
  - Lead-based Paint
  - Accessibility Issues
  - Call-for-Aid System
  - Historic Preservation Issues
  - Special Flood Hazard Areas

### Inspection - Energy and Water

This tab should be completed by the Energy Assessor. Describe the property’s exterior and interior physical condition. Use the text boxes to describe any needed upgrades or improvements, and also to describe any identified opportunities for reducing energy or water consumption. The report should identify, in detail, any deficient or deteriorated items that represent an immediate threat to health and safety. Additionally, the report should describe all other physical deficiencies including significant defects, items of deferred maintenance, and material building code violations that would limit the expected useful life of major components or systems.

The inspection report shall contain the following sections:

- Building Envelope, including Infiltration
- Apartments
- Building Systems, including:
  - Heating generation
  - Heating distribution
  - Cooling
  - Domestic hot water (DHW)
  - Gas supply
  - Other/Advanced systems
- Diagnostic testing results
- Water Audit

### Energy and Water Use

Use this tab to describe the historic energy and water consumption of the building. Enter the type of metering that exists for the apartment’s electricity and gas consumption. In the Summary of Utility Data Analysis table, summarize the project’s annual energy and water consumption and costs; show data for each energy type separately. Also enter the projected consumption and cost.

Calculate the requested benchmarking metrics outside of the template and enter the results in the Summary of Benchmarking Metrics section. The GHG Intensity Emissions Limit is taken from Local Law 97 of 2019.

Finally, calculate the allocation of costs for each end use listed in the template and enter the results.

### Flood Hazard and Heat Exposure Screening

The tab considers building weather/climate exposure and level of resiliency. As sea levels rise and extreme weather events increase in frequency, we must determine if affordable building stock can withstand the impacts. This tab uses maps to determine if assessed properties are in flood zones or areas of elevated heat exposure risk; if properties are at risk of flooding, assessors must determine potential flooding effects on the buildings.

In the Flood Hazard Exposure Screening [table 1], detail each building's coastal flood exposure, stormwater exposure, and heat exposure.

In the Property Risk Assessment [table 2], identify the risk exposure types from table 1. Coastal Flood Risk for each building must be determined and any at-risk residential uses and critical equipment. Only NYC properties have to consider stormwater flood risk. Also, determine in the comments column if there are pre-existing building resiliency measures or if the building has been flood-proofed.

### Electrification

This tab evaluates any recommended electrification or electrification readiness measures. New York State has demonstrated its commitment to building electrification and decarbonization through the Climate Leadership and Community Protection Act; more recently, the 2 Million Climate-Friendly Homes by 2030 legislation specifically targets the electrification-readiness and electrification of low-moderate income housing.

Go through the table and assess each listed electrification and electrification-readiness measure; follow the prompts regarding the evaluation, recommendation, and any associated cost factors of measures. Also, include a narrative section in the report on "Electrification and Electrification-Readiness" documenting the consideration of any or all such measures.

### Solar Screening Results

All projects where a new roof or significant roof repairs are indicated as part of the scope are strongly encouraged to do a preliminary screening for solar, and mandatory for HPD projects. This will help building owners determine if solar is viable or, for HPD projects, determine if solar will likely be required as part of the project's scope as part of HPD's Solar Where Feasible mandate.

For HPD funded projects, providers are encouraged to work with Solar One, HPD's non-profit partner, who can assist applicants to perform a free feasibility screening using this link:

[https://solar1.formstack.com/forms/hpd\\_solar\\_feasibility\\_intake](https://solar1.formstack.com/forms/hpd_solar_feasibility_intake). Other projects may use this link:

<https://nysolarmap.com>. Note that this is a pre-screening only and projects that do include solar will likely need to update their analysis during the design and scoping process. The results page of the analysis should be included on the Solar Tab and the fully populated Solar Screening Tool should be submitted along with the IPNA submission.

## Local Law 97 Compliance Report and Worksheet

Local Law 97 passed in 2019 requires carbon reductions for most buildings > 25,000 sf. The law has alternative compliance pathways for most affordable housing ([click here for further details](#)).

This tab requires users to enter the information for all buildings subject to LL97, identify the building's LL97 compliance requirement and select the proposed compliance pathway. Buildings that will implement the Article 321 Energy Conservation Measures are asked to confirm that the measures are included in the scope of work or note which measures are not applicable. For covered buildings planning to comply with Article 320 emissions limits, the IPNA Provider is required to input the projected GHG emissions and provide a scope narrative demonstrating how the building will meet the applicable GHG emission limits. Details about the LL97 compliance requirements for affordable housing is available on HPD's website here: <https://www1.nyc.gov/site/hpd/services-and-information/ll97-guidance-for-affordable-housing.page>. This tab only applies to projects in NYC that are subject to LL97. All other projects may skip this tab.

## Scope and Preliminary Cost Estimates

Identify scope items that will correct the detailed physical deficiencies and/or lower the energy or water consumption of the building. The section should include the estimated costs and quantities of entire system or component replacement items, health items, energy efficiency and water conservation (EEWC) only items, and EEWC incremental items. Include all labor costs in the price estimates of scope items, and include costs for permitting, demolition, lead and asbestos abatement, and other relevant costs associated with the scope of work. Below are definitions of Capital Items, EEWC Incremental Items, EEWC-Only Items, and Health Items:

**Capital Items** are scope items that address the physical needs of the property such as entire system or component replacements, and significant deferred and other maintenance items that are not included solely for EEWC reasons. Examples of entire system or component replacement items are roofs, windows, and masonry.

**EEWC Incremental Items** are measures that in addition to providing entire system or component replacement also provide energy efficiency benefits. Examples of EEWC incremental items are installing a high-efficiency boiler when the boiler is being replaced and installing roof insulation when the roof is recommended to be replaced.

**EEWC-Only Items** are the energy and water efficiency scope items that are not associated with items requiring entire system or component replacement. These measures are recommended solely for their contribution towards reducing a property's energy and water usage. Recommendations for all types of EEWC items along with relevant payback periods and projected energy cost savings should be provided, including measures that have high installation costs and/or that yield deeper savings such as steam-to-hydronic heating system conversions and on-site renewables. Note that Energy Assessors should not rely solely on renewables, such as solar PV or thermal, to reach the energy savings goal, and priority should be given to durable cost-effective energy and water conservation strategies. Examples of EEWC-Only items include solar panels, boiler controls, low-flow fixtures, pipe insulation, replacing the boiler with a high-efficiency boiler before the end of its useful life, and efficient lighting.

Note that all EEWC Scope Items (EEWC-Only and EEWC Incremental) should include information on projected savings from implementing the recommended EEWC measure (both in dollars and in units of energy or water). Provide the simple payback and Savings-to-Investment Ratio (SIR) for each measure. Use the Notes section to describe how the savings estimates were derived (i.e. utility rates used, etc.) including any risks that might prevent a measure from achieving the estimated savings.

**Health Items** are the scope items that improve the indoor air quality and other health-related characteristics of a building. In addition to identifying health items to include in the scope of work for a project, each capital and EEWC item should include an assessment of whether it has a potential health benefit. The Healthy Rehab Interventions tab provides guidance on the intersection between health outcomes and targeted interventions. Examples of health items include sealing gaps in and around cabinets and fixing broken ventilation fans.

## Quality Control

This tab provides two types of Quality Assurance. First, the Energy and Water Saving Check table should be used by the Energy Assessor to self-check that the projected energy and water savings are reasonable. Enter each recommended EEWC measure and the estimated cost. Then calculate the percent of the total energy or water cost each measure's savings represents. Costs and savings that are outside of reasonable ranges will be flagged.

## Project Savings Summary

This tab pulls data from other tabs in the IPNA to provide an overall summary of the energy savings associated with the project. The summary takes into account fuel savings, costs of the overall project, and breaks down costs by scope area and by measure type.

## Operation and Maintenance

Include recommendations for measures that can be addressed through improved maintenance and operations, including janitorial methodologies and products, preventative maintenance best practices, and recycling and waste management. The [Two Shades of Green: Green and Healthy Property Management Guide](#) shall be used as guidance, as should Intervention-O&M table on this tab, the Healthy Rehab Interventions tab, and the Health Questionnaire tab.

## Healthy Rehab Interventions

This tab contains health, green, and safety interventions involving Air Contaminants both Indoor and Outdoor, Moisture, Pest Control applications, Hazardous Materials, Physical and Health activities and Prevention of Falls/Trip/Fire Hazards.

Enter whether any of these Healthy Rehab Interventions apply to your project or not. Range of Impacts and Potential Cost guidance is provided along with relevant NYC Code and resources if applicable.

Citations for Enterprise Green Communities criteria sections are provided.

## Replacement Cost Schedule

List all recommended improvements, including critical, short term, and long term capital needs; energy efficiency and water conservation recommendations; and proposed health and safety measures. Analyze and project the estimated useful life of building components, then estimate the replacement cost per unit, quantities, and annual replacement expenditures for a twenty (20) year period. The costs outlined in the replacement schedule should be total costs for each scope item, accounting for inflation and inclusive of all incremental costs of EEWC measures.

## Photos

This tab is primarily a reminder to include photos. Photos do not necessarily need to be inserted in this tab, and can be handled separately, such as in Adobe Acrobat with a final PDF report.

If the photos are initially in a separate document, we strongly recommend creating a single final pdf document that includes the IPNA report and all of the photos. Be sure to label each photo to clearly indicate the location of the photo, what is shown, and any deficiencies identified.

Document typical conditions present, with a focus on physical deficiencies.

Include front and typical elevations and exteriors, site work, parking areas, roofing, structural systems, plumbing, HVAC and electrical systems, conveyance systems, life safety systems, representative interiors, and any special or unusual conditions present (per ASTM E2018).

### External Calcs

These external calculations tabs are intended to capture any external calculations used to complete other sections of the IPNA. External calculations do not necessarily need to be entered in this tab and can be submitted separately.

### Completeness Check

Once all the project data has been entered, this tab will confirm that the information provided meets the specified criteria. The flags will provide a high-level understanding of what needs to be adjusted to meet the criteria.

### Health Questionnaire

This annotated section is optional and is provided for environmental quality background purposes. Areas of focus include subcategories for Common Areas as well as Apartment measure considerations.

### Project Summary Sheet

This section auto-populates information entered in previous sections to create a Project Summary Sheet, a requirement for NYSERDA's FlexTech program final report that can assist with energy audit associated costs.

## REFERENCES

Green Physical Needs Assessment and Technical Assistance Service Provider. 2015 Request for Qualifications for Professional Consultant. NY City Housing Development Corporation. February 26, 2015.

Multifamily Accelerated Processing (MAP) Guide. R 1.1. U.S. HUD. January 29, 2016. (Reference guide for the HUD C.N.A. e-tool.)

Procedures for Commercial Building Energy Audits, Second Edition. ASHRAE. 2011.

Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Standard E 2018-15. ASTM International. 2015.

**APPENDIX A – CERTIFICATION EXAMPLES  
(FOR REFERENCE ONLY)**

	AEE CEM	AEE CEA	AEE CMVP	BPI MFBA	RES-NET HERS	ASHRAE HPBD	ASHRAE BEAP	PE	RA	DoHMH Healthy Buildings Training Certified	NYSERDA Flex Tech	ASTME 2018-08 Appendix XI.1	Minimum Work Experience (years)	Notes
<b>Energy Assessor</b>														
IPNA	X	X	X	X	X	X	X						3	"Review and approve"
HPD/HDC GPNA	X			X										
NYSERDA - Multifamily Building Solutions Network	X	X		X				X	X				5	"Conducted or supervised"
NYSERDA - FlexTech Consultants								X					5	
HUD CNA e-Tool	X	X		X	X	X		X	X				3	
ASHRAE Level II	X	X	X			X	X							Non-mandatory
NYC LL87	X	X		X		X	X		See Note		X			Must either be supervised by licensed design professional or registered with BOB and hold one of the certifications; FlexTech only allowed under design professional.
Freddie Mac Multifamily Green Advantage	X			X										
<b>Needs Assessor</b>														
IPNA								X	X	NYC bldgs only			3	
HPD/HDC GPNA								X	X					PE/RA - "At least one member of the team"
HUD CNA e-Tool												X		



	AEE CEM	AEE CEA	AEE CMVP	BPI MFBA	RES-NET HERS	ASHRAE HPBD	ASHRAE BEAP	PE	RA	DoHMH Healthy Buildings Training Certified	NYSERDA Flex Tech	ASTME 2018-08 Appendix XI.1	Minimum Work Experience (years)	Notes
ASTM Field Observer														No specific requirement. Earlier in the standard (not in the Appendix) it says "general, well-rounded knowledge of pertinent building systems and components"
ASTM Report Reviewer							X	X						Non-mandatory

## APPENDIX B – EXAMPLE SAMPLING REQUIREMENTS FOR MULTIPLE - BUILDING PROJECTS

Agencies will review proposed sampling approaches and confirm sampling requirements. IPNA Providers are encouraged to submit IPNA applications as early in the process as possible.

### Example 1: Identical Buildings

A complex has four 10-story buildings with a total of 600 apartments. All the buildings are identical in design and were built at the same time in the 1960's. They can therefore be grouped into a single Building Type. The IPNA Standard requires an inspection of all non-apartment areas in all of the buildings and a minimum sampling of 10% of total number of apartments in each Building Type. Therefore, the non-apartment areas in each building need to be inspected, along with a minimum of 20 apartments (sampling cap for projects with over 200 units). The 20 inspected apartments should be evenly broken down between each building.

### Example 2: Similar Buildings, but One Different in Age

A complex has nine 5-story buildings all similar in design, construction method, and heating system type. However, eight of the buildings were built in the 1960's, and one was built 15 years later in the late 1970's. These buildings should be grouped into two Types, as shown in the table below:

Building Type	# of Bldgs	# Floors	Studio	1-BR	2-BR	3-BR	4-BR	Units/Bldg	Total Units	Year Built
Type A	8	5	3	4	10	10	3	30	240	1962
Type B	1	5	3	4	10	10	3	30	30	1977
<b>Totals</b>	<b>9</b>								<b>270</b>	

We require inspecting all non-apartment areas for each building, and a minimum of 10% of the apartments in each type, as shown in the table below:

Building Type	Minimum Sample Size
	Total # Units
Type A	20
Type B	3
<b>Totals</b>	<b>23</b>

### Example 3: Many Similar Buildings, Rehabbed at the Same Time

A complex has 20 buildings, all two-story, with a variety of units as shown in the table below:

Building Group	# of Bldgs	# Floors	Studio	1-BR	2-BR	3-BR	4-BR	Units/Bldg	Total Units	Year Built	Year of Gut Rehab
Group A	10	2	4	0	0	0	0	4	40	1950	2003
Group B	4	2	0	3	3	0	0	6	24	1952	2003
Group C	4	2	0			4	4	8	32	1956	2003
Group D	2	2	3	3	3	1	0	10	20	1955	2003
<b>Totals</b>	<b>20</b>								<b>116</b>		

The design, construction, and heating system type are similar for all 20 buildings, but layouts are different. All the buildings were built in the 1950's over a period of about six years. All units were gut-rehabbed in 2003: identical new interior finishes, appliances, heating and distribution systems, roofs, windows, and more. Because the gut rehab was so extensive and happened at one time, these buildings can be grouped into one Type for sampling. All of the buildings' non-apartment areas should be inspected and a minimum sample of 12 units should be inspected, distributed as evenly as possible through the buildings sampled.

**Example 4: Different Buildings**

A developer has 45 buildings, **all different**, scattered around town. There are a total of 520 apartments. all buildings need to be inspected (45 total) A minimum sample of 10% of the apartments must be inspected in each of the buildings, as described in the apartment sampling section of this Standard.

**Example 5: Four Types of Buildings**

A complex has 40 buildings, as described in the table below:

Building Type	# of Bldgs	# Floors	1-BR	2-BR	3-BR, one floor	3-BR, duplex	4-BR	Units/Bldg	Total Units
Type A	28	2	0	0	2	2	1	5	140
Type B	8	2	20	20	0	0	0	40	320
Type C	3	5	15	20	10	0	5	50	150
Type D	1	17	68	51	51	0	34	204	204
<b>Totals</b>	<b>40</b>								<b>814</b>

Each of the buildings within each type is identical, but each Type of building is distinct from the other types because they have very different construction and age. In this case, the sampling rules should be applied to each type separately as shown in the table below, keeping in mind that the sampling cap is 20 units:

	Minimum Sample Size
<b>Building Type</b>	<b>Total # Units</b>
Type A	14
Type B	20
Type C	15
Type D	20
<b>Totals</b>	<b>69</b>

## APPENDIX C – Summary of Previous Changes

Date Updated	Version	Section	Description of Change	Page Number
4/14/2023	3	Definitions	Added the IPNA Management Committee Definition	Pages 5-6
4/14/2023	3	IPNA Annual Updates	Added the frequency of IPNA Standard and Tool	Page 7
4/14/2023	3	IPNA Annual Updates	Added Sustainability Guideline adherence reminder	Page 4
4/14/2023	3	Statement of Qualifications and Experience	Added frequency of RFQL issuances for IPNA and Technical Assistance Service Providers; Updated qualification of and experience language to reflect verbiage from the most recent RFQL; Also added annual maintenance requirements for existing Providers. Included most recent language from the RFQL requirements.	Pages 6-9
4/14/2023	3	Capital Needs to Review	Revision of “Short-Term Needs” and “Long-Term Needs” timeframes	Page 8
4/14/2023	3	Flood Hazard and Heat Exposure Screening	Added explanation of new “Flood Hazard and Heat Risk Exposure” tab	Page 16
4/14/2023	3	Electrification Tab	Added explanation of new “Electrification” tab	Page 16
12/6/2021	2	Local Law 97	Added description for the for the Local Law 97 Compliance Report and Worksheet	Page 17
12/6/2021	2	IPNA Template	Added guidance for multiple buildings	Page 12
12/6/2021	2	Solar Screening Results	Revised solar summary references and tab description. Also, clarification it only needs to be completed by HPD projects.	Page 16-17
12/6/2021	2	Universal Update	Updated broken hyperlinks	
12/6/2021	2	Photos	Added guidance to label photos in the tab description	Page 19