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Multifamily New Construction Program (MF NCP) Guidelines

Program Opportunity Notice (PON) 3319

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1 INTRODUCTION

The Multifamily New Construction Program (MF NCP) focuses on:

- Increasing awareness of, information about, and demand for deep energy savings and zero net energy performance in the multifamily high rise new construction and gut rehabilitation markets.
- Strengthening the capacity of clean energy professionals to deliver design and construction services to the multifamily markets.
- Supporting New York State (NYS) and New York City (NYC) housing agencies, funding authorities, and municipalities in their efforts to secure the most efficient, durable, resilient and healthy housing, based on technical and economic feasibility, while striving to maximize effective use of the resources available to achieve those goals. These activities are significantly, but not exclusively, targeting the Low to Moderate Income (LMI) housing sector.
- Identifying and promoting integrated design solutions that can be replicated, with a focus on cost optimization analysis and financing strategies that recognize operational costs and savings and management of perceived risks.

MF NCP is designed to support developers serving multifamily high rise new construction and gut rehabilitation projects by providing technical support and guidance. MF NCP requires the Applicant to hire a Multifamily New Construction Partner (Partner) to act as the primary resource for their participation in MF NCP. The incentive structure is multi-tiered, focusing support and incentives toward promotion of higher levels of comprehensive building and energy performance, up to and inclusive of net zero performance. Use of solar photovoltaic generation and other renewable energy systems is specifically encouraged to achieve the higher performance targets. MF NCP is closely aligned with the Low-Rise Residential New Construction Program (LR NCP) to more seamlessly support the higher performance multifamily new construction market.

For additional information and related documents, please visit the Multifamily New Construction website page at:
http://www.nyserda.ny.gov/All-Programs/Programs/Residential-and-Multifamily

2 REQUIREMENTS FOR PARTICIPATING IN MF NCP

MF NCP offers project teams technical support and guidance to achieve higher levels of energy performance and health & safety from planning through construction. Projects must meet the requirements detailed in these MF NCP Guidelines and achieve their approved performance targets to receive NYSERDA's financial incentives (if applicable).

2.1 Compliance Paths

At the time of application, projects must select one of the following compliance paths:

2.1.1 Performance Path with ENERGY STAR®

This compliance path follows the standards developed by the US Environmental Protection Agency (EPA) for the ENERGY STAR Multifamily High Rise (MFHR) program. This pathway requires the Partner to create a model of the proposed building design based on ASHRAE standards and compare it to a baseline model. The difference in the utility cost savings of the two models must equal or exceed the performance target specified in the project's approved performance tier. Projects following the Performance Path with ENERGY STAR are required to adhere to all *ENERGY STAR MFHR Performance Path Prerequisites* and *Testing & Verification Protocols*. See Application Section 3.1.1 for information on ENERGY STAR MFHR eligibility. See Section 4 of these Guidelines for more information on this pathway.

2.1.2 Passive House Institute US (PHIUS)

Projects following this compliance path must comply with the PHIUS+ Multifamily Certification Standard developed by the Passive House Institute US (PHIUS). The project must contract with a Certified Passive House Consultant (CPHC®) and a PHIUS+ Verifier, and must pursue, and obtain, certification by PHIUS. In addition to meeting the PHIUS requirements, PHIUS path projects are required to submit the *ENERGY STAR MFHR Photo Template.*

2.1.3 Passive House Institute (PHI)

Projects following this compliance path must comply with the Passive House Standard developed by the Passive House Institute (PHI). The project must contract with a certified PHI Consultant or Designer and an accredited PHI Certifier, and must pursue, and obtain, certification by PHI. In addition to meeting the PHI requirements, PHI path projects are required to submit the *ENERGY STAR MFHR Photo Template.*

The North American Certifiers Circle is currently developing a third-party verification program called VeriPHy. Until VeriPHy is released, projects following this compliance path must record the results of all testing and verification in the corresponding sections of the *ENERGY STAR MFHR Testing & Verification Workbook*. Once VeriPHy is released, NYSERDA will evaluate the program and consider allowing that process to replace this requirement for PHI projects.

2.1.4 Modified Prescriptive Path (MoPP)

This compliance path requires the project to meet the set of requirements specified in the *Modified Prescriptive Path Requirements (MoPP)* as set forth in Section 7 of these Guidelines and the *ENERGY STAR MFHR Testing & Verification Protocols*. Inclusion of these requirements is considered to equal or exceed the performance target specified in the project's approved performance tier. The MoPP allows some exceptions to its requirements for gut rehabs and historical buildings. This pathway does not result in an ENERGY STAR label, but may result in the New York Energy $mart designation from NYSERDA. See Section 7 of these Guidelines for more information on this pathway.

2.2 Performance Tiers

At the time of application, projects must select and commit to meeting one of the following performance tiers. To be eligible to receive the associated incentives, the project must achieve the performance target associated with their approved performance tiers.

2.2.1 Tier 1

Tier 1 is available to new construction projects following the Performance Path with ENERGY STAR or the MoPP.

For gut rehab projects, Tier 1 is only available to projects following the Performance Path with ENERGY STAR.

For projects following the Performance Path with ENERGY STAR, the project must, at minimum, achieve a performance rating of 15% above ASHRAE Standard 90.1. The version of ASHRAE 90.1 that must be used is dependent on what version of NYS Energy Code the project is permitted under. If the project is permitted under Energy Conservation Construction Code-New York State (ECCCNYS) 2014, then the project's performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCCNYS 2016, then the project's performance rating is in reference to ASHRAE 90.1-2013.

Additionally, projects pursuing either the PHIUS or the PHI compliance path that are designed to achieve either Tier 2 or 3 and that meet all requirements of Stages 1 and 2 for that path and tier, may qualify for Tier 1 if they submit a Stage 3 submittal that is complete and approvable with the exception of having received full certification from the applicable standard organization.

2.2.2 Tier 2

Tier 2 is available to new construction and gut rehabilitation projects following the Performance Path with ENERGY STAR, the PHI path or the PHIUS+ path. Tier 2 is also available to gut rehabilitation projects following the MoPP.

For projects following the Performance Path with ENERGY STAR, the project must, at minimum, achieve a performance rating of 25% above ASHRAE Standard 90.1. The version of ASHRAE 90.1 that must be used is dependent on what version of NYS Energy Code the project is permitted under. If the project is permitted under ECCCNYS 2014, then the project's performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCCNYS 2016, then the project's performance rating is in reference to ASHRAE 90.1-2013.

Projects following either Passive House path need to comply with the minimum requirements of the applicable Passive House standard, achieving certification to either PHI or PHIUS+.

2.2.3 Tier 3

Tier 3 is available to new construction projects following the Performance Path with ENERGY STAR, the PHI path or the PHIUS path. Tier 3 is available to gut rehab projects following the Performance Path with ENERGY STAR, with an adjusted baseline equivalent to that required of a new construction project.

For projects following the Performance Path with ENERGY STAR, the project must, at a minimum, achieve a performance rating of 35% above ASHRAE Standard 90.1 without inclusion of any renewable or distributed generation and a performance rating of 42% above ASHRAE Standard 90.1 including any renewable or distributed generation. The version of ASHRAE 90.1 that must be used is dependent on what version of NYS Energy Code the project is permitted under. If the project is permitted under ECCCNYS 2014, then the project's performance rating is in reference to ASHRAE 90.1-2010. If the project is permitted under ECCCNYS 2016, then the project's performance rating is in reference to ASHRAE 90.1-2013.

For projects following the PHI path, the project must be designed, constructed, and certified to PHI standards and must achieve, at maximum, a Primary Energy Demand calculation of 33 kBtu/ft^2/year without inclusion of any renewable or distributed generation, and a Primary Energy Demand calculation of 29 kBtu/ft2/year including any renewable or distributed generation. Calculation of this Primary Energy Demand threshold must rely on use of the PHI-required energy modeling tool; and the project must meet the minimum PHI requirements needed for the project to be certified as meeting the PHI standard. Both Primary Energy Demand thresholds may exclude the energy use attributed to amenities, such as dishwashers, laundry and exterior lighting, as discussed in Section 5.5.1 of this document.

For projects following the PHIUS path, the project must be designed, constructed, and certified to PHIUS+ standards and must achieve, at maximum, a Primary Energy Demand calculation of 5,200 kWh/person/year without inclusion of any renewable or distributed generation, and a Primary Energy Demand calculation of 4,200 kWh/person/year including any renewable or distributed generation. Calculation of this Primary Energy Demand threshold must rely on use of the PHIUS-required energy modeling tool; and the project must meet the minimum PHIUS+ requirements needed for the project to be certified as meeting the PHIUS+ standard. Both Primary Energy Demand thresholds may exclude the energy use attributed to amenities, such as dishwashers, laundry and exterior lighting, as discussed in Section 6.5.1 of this document.

2.3 Deadlines

For projects following any path, the Stage 1 submittal for each path, as detailed in Sections 4, 5,6, and 7, must be submitted no later than 30 days after the Buildings Department's final approval of New Building Architectural, Mechanical, and Plumbing plans.

2.4 Incentive Caps

Incentives are capped on a per project basis, and vary based on market type, year of application approval, and Performance Tier. These caps can be found in Section 3.2.1 of this document.

3 APPLICATION

This section details the requirements for participation in MF NCP. Prior to submitting an MF NCP Application Package to NYSERDA, the Partner must work with the potential Applicant to determine MF NCP eligibility, market type and estimated incentives. The Partner is expected to take the leading role in the Application process.

3.1 Establishing a project

At the onset of their relationship with a potential Applicant, the Partner must determine whether the project is eligible for MF NCP. This section details the requirements for determining MF NCP eligibility.

3.1.1 Eligibility Requirements

Applicants will be required to execute an MF NCP Terms and Conditions Agreement with NYSERDA, and deliver completed projects that, at a minimum, meet the requirements detailed in these Guidelines and other MF NCP documents. To be eligible for MF NCP participation, a project must be, or be capable of and intend to be, a New York State electricity distribution customer of a participating utility company that pays into the System Benefits Charge. Project eligibility is fuel-neutral.

NYSERDA has the sole discretion for determining an Applicant's eligibility to participate.

3.1.1.1 Project Size

The project must be a multifamily building(s) with ten (10) or more units and four (4) or more stories.

Low-rise buildings, defined as having three (3) or fewer stories, and projects with less than 10 units are not eligible for MF NCP, and may apply to NYSERDA's PON 2309 Low-Rise Residential New Construction Program (LR NCP). For additional information on the LR NCP, please visit: http://www.nyserda.ny.gov/All-Programs/Programs/Low-Rise-Residential/Low-Rise-Residential-New-Construction-Multifamily

3.1.1.2 Eligible Types of Construction

The MF NCP will accept both new construction and gut rehabilitation, as defined below:

> **New Construction**: A new building, or portion within a new building, where a licensed professional architect or engineer has prepared and certified the building plans.
>
> **Gut Rehabilitation**: Substantial renovation, one of the following types of projects where a licensed professional architect or engineer has prepared and certified the building plans:
>
> - Change of use and reconstruction of an existing building or space within;
> - Construction work of a nature requiring that the building or space within be out of service for at least 30 consecutive days;
> - Reconstruction of a vacant structure or space within.

3.1.1.3 Intended Use

The primary intended use of the building must be residential.

Projects may contain non-residential (commercial and/or retail) space if that space does not consist of more than 50 percent of the occupiable square footage of the entire building.

Commercial facilities, such as motels/hotels, group homes, dormitories, shelters, monasteries, nunneries, assisted living facilities and nursing homes are not eligible for MF NCP.

Supportive Housing, single room occupancy (SRO) facilities, and senior living residences that do not include nursing or hospitalization amenities are eligible for MF NCP based on a case-by-case review by NYSERDA. Supportive Housing is defined as residences that are owned and operated by non-profit organizations. Tenants are individuals and families who require both affordable permanent housing and support services, have lease agreements, pay rent (often a percentage of their income) and abide by the terms of their lease. This includes people who have been homeless, have histories of substance abuse, are coping with mental illness, have chronic illnesses like HIV/AIDS, are young adults aging out of foster care, are homeless veterans, or are grandparents raising grandchildren.

This is not a comprehensive list of property types that are eligible for MF NCP. Special circumstances may be reviewed by NYSERDA and considered for eligibility on a case-by-case basis.

3.1.1.4 ENERGY STAR Eligibility

Projects that have applied to MF NCP that meet the Performance Path with ENERGY STAR requirements are eligible to apply directly to the EPA for the ENERGY STAR MFHR label for the units within the building. Use the EPA ENERGY STAR Multifamily New Construction Program Decision Tree to determine whether your project qualifies for the ENERGY STAR label:
https://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/MFHR_Flowchart_v1.1.pdf?5546-0786

All EPA ENERGY STAR referenced documentation is located at:
https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

Please refer to the EPA for more information on the ENERGY STAR MFHR Certification Process:
https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_certification

3.1.2 Definition of a Project

For the purpose of MF NCP, a project is defined as a building or group of identical buildings. The Partner will develop one Building Performance Plan or complete one Modified Prescriptive Path Calculator for each project. Each building in a project must adhere to the requirements of the approved compliance path, including the applicable testing and verification protocols. Each building must receive separate Open Wall Inspections.

A group of buildings that includes more than one building design must apply to MF NCP as multiple projects. The Partner must submit a separate Application Package for each building design. At the modeling stages, the Partner must submit a separate Building Performance Plan or Modified Prescriptive Path Calculator for each design.

Final determination of how a project is defined is at NYSERDA's discretion.

3.1.3 Determining Market Type

Once the Partner has worked with the Applicant to verify that the project is eligible for MF NCP, they must determine the project's market type: Low to Moderate Income or Market Rate. NYSERDA defines Low to Moderate Income (LMI) projects as projects in which the majority of dwelling units are expected to be occupied by households earning no more than 80 percent of the State or Area Median Income,

whichever is greater. All properties are considered Market Rate unless eligibility for the LMI incentive amounts can be established, on a per dwelling unit basis, by applying one of the methods detailed in Section 3.1.3.1.

3.1.3.1 Low to Moderate Income (LMI)

To establish eligibility for the LMI incentive amounts and project caps, documentation must be submitted as soon as possible and prior to the first incentive payment the project is eligible for, which is dictated by the path selected. There are three methods to verify that the project is eligible for LMI incentives:

a. *Proxy*: NYSERDA allows certain proxies to verify LMI eligibility. Please see Table 3.1 for approved proxies. Additional proxies may be considered by NYSERDA to establish eligibility for LMI incentives on a case by case basis. The number of eligible LMI dwelling units for projects funded through NYS Housing Finance Agency's (HFA's) 80/20 Program or NYC HDC's 80/20 or Mixed Income Programs may be established based on their regulatory funder's award letter or contract documents.
b. *Rent Roll*: The Rent Roll method applies only to gut rehabilitation projects that do not meet the LMI eligibility proxies; or to projects funded through NYS HFA's 80/20 Program or NYC HDC's 80/20 or Mixed Income Programs. This method may not be combined with the Resident Income method. Applicants must submit the annual rent, size, and occupancy for each apartment in the project. The majority of dwelling units must have a calculated household income no greater than 80 percent of the State or Area Median Income based on the assumption that 30 percent of household income is applied to housing costs (i.e. rent). A calculation spreadsheet tool is available on the MF NCP Partner Portal for determining Rent Roll income eligibility.
c. *Resident Income*: The Resident Income method applies only to gut rehabilitation projects that do not meet the LMI eligibility proxies; or to projects funded through NYS HFA's 80/20 Program or NYC Housing Development Corporation's (HDC's) 80/20 or Mixed Income Programs. This method may not be combined with the Rent Roll method. Applicants must submit signed Resident Income Certification forms with supporting documentation for a majority of the project's dwelling units. Resident Income Certification Instructions and related forms are available on the MF NCP Partner Portal.

3.1.3.2 Market Rate

Eligible projects that do not qualify for LMI incentives amounts and project caps as detailed above may be eligible for Market Rate incentives.

Table 3.1 Low-to-Moderate (LMI) Proxies

ELIGIBILITY PROXY	DETAILS	TYPE OF DOCUMENTATION
1. U.S. HUD-Regulated Affordable Housing	Properties that receive one of the following subsidies from HUD are defined as LMI: • Section 8 Contract • Sections 202, 236, 811 • Public Housing Authorities	Provide a copy of the HUD contract or contract award notice.
2. NYS HCR-Regulated Affordable Housing	Buildings with subsidized mortgages or contracts that place them under the regulatory control of HCR are defined as LMI.	Provide a copy of HCR contract or contract award notice.
3. Low Income Housing Tax Credits	Properties that receive tax credits for at least 50% of its units are defined as LMI.	Submit a copy of tax credit award notice from HCR or HPD.
4. NYC HPD-Regulated Affordable Housing (or other local housing agency)	Properties with loans, mortgages, or deeds of purchase (HDFC incorporation) from HPD or other local housing agencies are defined as LMI.	Provide documentation of current mortgage, loan closing, HDFC incorporation, or deeds.
5. SONYMA Mortgage Insurance	Properties subsidized for Low to Moderate Income multifamily residents with SONYMA subsidized financing through the HFA are defined as LMI.	Provide a copy of loan closing/mortgage insurance award documents.
6. Participation in NYS HFA's 80/20 Program	Properties that have been accepted into the Housing Finance Agency's 80/20 Program that do not incorporate a majority of LMI dwelling units are eligible to request LMI incentives for each dwelling unit that meets the definition detailed in Section 3.1.3 or 3.1.3.1.b, with the total incentives subject to the Market Rate project cap.	Provide a copy of the award letter or HFA contract documents.
7. Participation in NYC HDC's 80/20 or Mixed Income Programs	Properties that have been accepted into the New York City Housing Development Corporation's 80/20 Program or Mixed Income Program that do not incorporate a majority of LMI dwelling units are eligible to request LMI incentives for each dwelling unit that meets the definition detailed in Section 3.1.3 or 3.1.3.1.b, with the total incentives subject to the Market Rate project cap.	Provide a copy of the award letter or HDC contract documents.

3.2 Incentives

Projects that have received a funding commitment from NYSERDA for Tier 2 or Tier 3 performance targets and that have met all those requirements are eligible to request payment of the corresponding incentives. The incentives available through MF NCP are based on market type, year of application approval, number of dwelling units and performance tier.

3.2.1 Calculating Incentives

There are separate incentive schedules for LMI and market rate projects. Additionally, within each market type incentive schedule, there are different incentives based on the year of application approval, number of dwelling units and performance tier associated with the project.

For projects that have fewer than 50 dwelling units, the incentive per dwelling unit amount listed for "10-49 dwelling units" applies to all dwelling units. For projects that have 50 or more dwelling units, the first 49 dwelling units receive the incentive per dwelling unit amount listed for "10-49 dwelling units", and the balance of the units receive the incentive per unit amount listed for "50+ dwelling units".

For example, an LMI 40 dwelling unit project with an application approved in 2016 would receive:

40 dwelling units x $1,000/unit = $40,000

An LMI 80 dwelling unit project with an application approved in 2016 would receive:

(49 dwelling units x $1,000/unit) + (31 dwelling units x $600) = $67,600

Incentives are capped for each project based on market type, year of application approval and Performance Tier as listed here.

LMI						
2016			Performance Tier	2017		
10-49 dwelling units	50+ dwelling units	Cap		10-49 dwelling units	50+ dwelling units	Cap
$ -	$ -	$ -	Tier 1	$ -	$ -	$ -
$ 1,000	$ 600	$100,000	Tier 2	$ 1,000	$ 500	$100,000
$ 3,500	$ 3,000	$300,000	Tier 3	$ 3,500	$ 3,000	$300,000

Market Rate						
2016			Performance Tier	2017		
10-49 dwelling units	50+ dwelling units	Cap		10-49 dwelling units	50+ dwelling units	Cap
$ -	$ -	$ -	Tier 1	$ -	$ -	$ -
$ 500	$ 300	$ 50,000	Tier 2	$ 400	$ 200	$ 40,000
$ 2,500	$ 2,000	$200,000	Tier 3	$ 1,400	$ 1,200	$120,000

3.2.2 Incentive Payment Schedules

The Applicant will receive the incentives that NYSERDA has approved for their project after each submittal Stage has been approved.

Incentive payment at each Stage is a set percentage of the total approved incentive. The incentive payment schedule is based on Compliance Path and Performance Tier.

In order to receive the full incentive amount, projects must verify that they have achieved the performance targets specified in their approved performance tier and each submittal must be approved by NYSERDA. If the project does not meet the performance target, the Partner must contact the Case Manager, as defined in 3.3.3(2), prior to submittal. The Case Manager will provide the adjusted incentive amount, if applicable.

	MF NCP - Incentive Payment Schedule					
	Stage 1		Stage 2		Stage 3	
	Performance Path, PHI, PHIUS	MoPP	Performance Path, PHI, PHIUS	MoPP	Performance Path, PHI, PHIUS	MoPP
Performance Tier	**LMI and Market Rate**					
Tier 1	N/A	N/A	N/A	N/A	N/A	N/A
Tier 2	25%	N/A	25%	50%*	50%	50%*
Tier 3	10%	N/A	25%	N/A	65%	N/A

*gut rehabs only

3.2.3 Renewable Energy Measures

MF NCP encourages Applicants to incorporate photovoltaics and other renewables into their projects to achieve performance targets[1]. Although on-site and/or renewable generation are not eligible for installation incentives through this offering, integration or use of renewable generation will be strongly encouraged for projects aiming to meet Tier 3 performance targets. By participation in MF NCP, the resulting on-site and and/or renewable generation solutions are not restricted from receiving incentives through NY-Sun or others for the use of renewable energy technologies.

3.3 Application Documents and Processing

Upon identifying an eligible project, the Partner, in consultation with the Applicant, should submit a MF NCP Application. This Section outlines the process and requirements for submitting a complete Application Package. Reference the *Application Submittal Checklist*, which can be found on NYSERDA's website or the MF NCP Partner Portal, for more details.

[1] Projects that otherwise meet the Tier 3 requirements intending to seek NYSERDA's commitment for and payment of those Tier 3 incentives will be required to locate the solar electric array(s) on-site, co-located with the project's buildings. Project applicants may seek a waiver from NYSERDA to allow a properly sized solar electric array to be located on a remote site and in a manner that allows a remote net metering arrangement to achieve the required offset of the project's predicted energy use. To receive NYSERDA's approval of the waiver request, the Applicant must demonstrate the solar electric array's ownership is structured in a manner that assures its output will be dedicated to the project for a minimum term of twenty years. Additionally, the remote net metering arrangement and interconnection must be approved by the distribution utility.

3.3.1 Application Package Contents

1. *Project Information Form*: identifies basic information about the project. Although this form is not a required Application document, it has been provided to assist the Partner in gathering information about the project in one place, to simplify data entry into the online Application.
2. *Terms and Conditions*: an acknowledgement by the Applicant of the MF NCP requirements. The person who signs the Terms and Conditions must be the authorized signatory for the Applicant organization. An authorized signatory has the ability to contractually bind your organization. (An authorized signatory may be different from the project manager or primary contact.)
3. *W-9*: required document for payment. The Applicant (Property Owner/ Company Name) must exactly match the *Project Information Form, W-9, Terms and Conditions* and *EFT Form*. The name of the Applicant must be complete, including the company designation (Inc., Co., LLC, LP, etc.).
4. *LMI Documentation* (if applicable)
5. *Electronic Funds Transfer (EFT) Form*: required document for payment
6. *EPA ENERGY STAR MFHR Developer Partnership Agreement* (if not previously submitted, for Performance Path with Energy Star projects only): to be completed by the developer/owner responsible for the project's design, financing and construction. A copy of the Agreement can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_dev_partners

3.3.2 Completion Instructions

1. Review the Application documentation for completeness. Check the *Project Information Form*, *Terms and Conditions*, *W-9*, *LMI Documentation* (if applicable), *EFT Form* and *EPA MFHR Developer Partnership Agreement* (if applicable) for completeness and accuracy before starting an online application.
2. Start an online application. The Application Package must be submitted online via the CRIS Database. The Partner will log in to the CRIS database using the Partner's login and password. Use the *Project Information Form* to complete the Application.
3. Upload Application documents. Upload the *Terms and Conditions*, *W-9*, *LMI Documentation* (if applicable), *EFT Form* and *EPA MFHR Developer Partnership Agreement* (if applicable).
4. The CRIS database will acknowledge your complete application via email.
5. NYSERDA will review the application. NYSERDA will contact the Partner and the Applicant to confirm application receipt.

NOTE: Submission of a completed application does not entitle the Applicant to MF NCP participation, nor payment of incentives. Final determination of project eligibility, NYSERDA's commitment of incentives, and payment of incentives resides with NYSERDA.

3.3.3 Contact Information

1. Eligibility, Intake and Application Inquiries - A team of individuals reviews each Application and responds to inquiries related to applications, eligibility and intake. Inquiries should be directed to NYSERDA at MFNCP@trcsolutions.com.
2. Project Inquiries - After receiving the Application Approval Letter, all project related correspondence must be directed to the Program Implementer's Case Manager assigned to the project. The Case Manager is the liaison between the Partner and NYSERDA, receives and reviews MF NCP submittals from the Partner, answers programmatic questions, and serves as daily contact informed of your project's programmatic progress. Contact information will be provided upon assignment.

3.4 Scoping Session

Once NYSERDA has approved the project's application, the next step is for NYSERDA to schedule a Scoping Session with the Applicant, the Partner and the project team. The intent of the Scoping Session is to discuss general project information and review MF NCP requirements and responsibilities for each party. The Scoping Session may also identify additional documents that will need to be completed in order to establish the project in NYSERDA's financial systems. Knowledgeable representatives from both the Partner and Applicant are required to attend the Scoping Session. After the Scoping Session, if all parties agree to move forward with this project in MF NCP, NYSERDA will send an Award Letter to the Applicant verifying that the application is approved to participate in the MF NCP. Final approval and issuance of the Award Letter are at NYSERDA's discretion.

4 PERFORMANCE PATH WITH ENERGY STAR

The following section describes the requirements of the Performance Path with ENERGY STAR. Please reference Appendix A of this document for the Performance Path Process Flow Chart.

4.1 Submittal Requirements

In order for the Applicant to receive the NYSERDA incentives approved for their project, the Partner must submit the required documentation as detailed in the Stages below. These submittals will be reviewed by the MF NCP Implementer and NYSERDA. The three submittal Stages are described below. The incentives will only be paid if these submittals are approved by NYSERDA. All documents listed in this section must be submitted to the project's assigned Case Manager and approved by NYSERDA.

4.1.1 Stage 1: Energy Modeling Submittal

The first NYSERDA incentive is available to the Applicant when the project has reached design completion and NYSERDA has approved the Energy Modeling Submittal. This submittal must show that the project achieves the Performance Target and meets the requirements of the *ENERGY STAR MFHR Performance Path*. If the energy model indicates the intended performance target will not be met, the Partner must contact the Case Manager prior to submittal.

The Energy Modeling Submittal must be submitted no later than 30 days after the Buildings Department's final approval of New Building Architectural, Mechanical, and Plumbing plans. The Buildings Department's approval shall be submitted to the project's Case Manager upon receipt, but must be received by the submission of the Open Wall Submittal.

	Documents Required for Stage 1:	**Document Obtained From:**
☐	Applicant-Partner Contract (signed by both parties)	Partner created document
☐	LMI Documentation (if not previously submitted)	See Table 3.1
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal)	Permitting office that approved the Construction Documents
☐	*Proposed BPP Tables*	Partner Portal
☐	*Testing & Verification Worksheets*	EPA
☐	Statement of Energy Design Intent	EPA
☐	Energy Modeling files*	Partner created documents
☐	Complete Construction Documents (CDs)	Applicant/Developer/Design Team

*For eQUEST models, please submit the .inp, .pd2, and .prd files

4.1.2 Stage 2: Open Wall Submittal

The second NYSERDA incentive is available to the Applicant when the project has reached the Open Wall milestone and NYSERDA has approved the Open Wall submittal and Site Inspection Report. The Partner must submit a complete Open Wall Submittal to the Case Manager at least two weeks before the project reaches the Open Wall Milestone. This gives the MF NCP Site Inspector time to properly schedule the Open Wall inspection. The purpose of this Inspection is to verify that typical Open Wall components are installed in accordance with MF NCP requirements. This includes measures from the *Proposed Building Performance Plan (BPP)* and *ENERGY STAR MFHR Performance Path Prerequisites*.

	Documents Required for Stage 2:	**Document Obtained From:**
☐	*Inspection Request Form*	Partner Portal
☐	*Photo Template*	EPA
☐	*Testing & Verification Worksheets*	EPA
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal) (if not previously submitted)	Permitting office that approved the Construction Documents

4.1.3 Stage 3: As-Built Submittal

The third NYSERDA incentive is available to the Applicant when the project construction is complete, and NYSERDA has approved the As-Built Submittal, and *Data Release Authorization Forms* (DRAF) or Addendum 1 documents, as detailed below. This submittal must show that the project meets or exceeds the performance target specified in its approved performance tier and meets the requirements of the *ENERGY STAR MFHR Performance Path Prerequisites*. If the project does not meet the performance target, the Partner must contact the Case Manager prior to submittal.

The Partner must work with the Applicant to determine whether to submit *DRAFs* or to follow the Addendum 1 process.

- *DRAFs*: All projects are eligible to follow the DRAF process. The Partner must submit the *Owner* and *Tenant Data Release Authorization Forms* (DRAFs), which must include utility information for all common areas of the building and a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five (5) apartments. Of the 10 percent sample, at least one of each apartment type (e.g. studio, 1 bedroom, large 1 bedroom) must be represented.

- Addendum 1: To be eligible to follow the Addendum 1 process, Consolidated Edison Company of New York, Inc. ("Con Edison") must be the project's electric and/or gas utility. The *Addendum 1 Contract* gives the MF NCP Implementer access to the project's Con Edison accounts and allows the Implementer to request and obtain data from Con Edison on the Applicant's behalf. This replaces the need for *Tenant Data Release Authorization Forms*. The Partner must request a draft *Addendum 1 Contract* from their Case Manager and they must forward it to the Applicant for

signature. The Applicant must sign two copies of the *Addendum 1 Contract*, which the Applicant or the Partner will mail to the Case Manager. The Applicant must complete the *Owner Data Release Authorization Form*, sign the Con Edison Letter of Authorization and send a copy of the building's Con Edison bill to the Partner. The Partner must then complete the application tab of Con Edison's Aggregated Consumption Data Request form, compile all documents, and submit to the Case Manager.

By opting to follow this alternative, the Applicant authorizes NYSERDA to withhold $307.50* per borough-block-lot number (BBL#) from the final payment via an Addendum 1 (the number of BBL#s are determined by the Department of Buildings). The money withheld from the final payment offsets the cost incurred by NYSERDA to obtain the data from Con Edison. All data is kept strictly confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

	Documents Required for Stage 3:	**Document Obtained From:**
☐	*As-Built BPP Tables*	Partner Portal
☐	*Photo Template*	EPA
☐	*Testing & Verification Worksheets*	EPA
☐	Modeling files*	Partner created documents

*For eQUEST models, please submit the .inp, .pd2, and .prd files

DRAF Documents (not required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	*Tenant Data Release Authorization Forms* (executed)	Partner Portal
☐	List of each apartment number and type (e.g., studio, 1 bedroom)	Partner created document

Addendum 1 Documents (only required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	Signed *Addendum 1 Contract* (Email scanned copy and mail 2 original hard copies)	Case Manager created document
☐	Con Edison Letter of Authorization*	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Con Edison Spreadsheet - Aggregated Consumption Data Request	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Copy of Con Edison bill for project address and account numbers	Applicant/Developer
☐	Partner must provide "lease-up" date (date when the building will be occupied)	Partner/Applicant

* The signatory of this Authorization Form must be the Con Edison utility account holder

4.2 Software Requirements

The modeling software used to determine the project's utility cost savings must satisfy the requirements detailed in ASHRAE 90.1-2010 Appendix G simulation and documentation requirements, as modified in the *ENERGY STAR MFHR Simulation Guidelines*. The *Simulation Guidelines* contains a list of examples of simulation programs that meet the requirements. The *Simulation Guidelines* can be obtained from the following ENERGY STAR website:
https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

4.3 Associated Documents

4.3.1 Building Performance Plan

The *Building Performance Plan (BPP)* is a comprehensive reporting tool that provides general information about the project, details regarding the project's scope of work and achievement of the performance target. In addition, the BPP collects project-level cost information for Tier 3 projects. The *BPP* is a Microsoft Excel spreadsheet that assists the Partner in analyzing model inputs. It incorporates the *ENERGY STAR MFHR Simulation Guidelines Appendix*, as well as tabs that report information to NYSERDA and the EPA. There is extensive linking between the tabs in this document to reduce the amount of data entry required of the Partner. All tabs must be completed to ensure the spreadsheet works properly. The more complicated tabs have numbered instructions on how to properly fill in the required information. Instruction tabs provide further information.

The cells and tabs are color-coded to guide the Partner in properly filling in the *BPP*. All cells that require the Partner to input information are blue. All grey and green tabs must be completed for Stage 1 and 3 submittals:

- *Introduction Tabs* (yellow): Provides general instructions for completing the *BPP*.
- *Version History* Tab (yellow): Provides information about the changes made in this version of the *BPP*.
- *Basic Info Tab* (grey): Enter basic building information. The Partner should fill out this section first since it is linked to other cells in the tool.
- *Model Inputs Tab* (grey): Enter details of how the baseline and proposed buildings were modeled. Follow the formatting guidelines presented as comments (red corners) where available.
- *Reporting Summary Tab* (grey): Enter general information about the project and the model. Provides specifics about the ASHRAE compliant design of the Baseline Building and the energy efficient design in the Proposed Design.
- *Detailed Measures Tab* (grey): A summary of all energy-saving measures and their associated savings.
- *Results from eQuest Tab* (grey): For eQuest users only, this worksheet is based upon the Parms.csv file that is generated upon simulation of your project. If those results are pasted into this worksheet according to the directions, a significant amount of this workbook will autofill. If the Partner used modeling software other than eQUEST, this tab does not need to be completed.
- *Simulation Guidelines Appendix Tabs* (green): These worksheets assist the Partner in calculating the inputs needed to model their projects in eQUEST or similar modeling tools. These tabs are required to be completed for the Stage 1 and Stage 3 submittals.

4.3.2 Testing and Verification Protocols and Worksheets

Projects following the Performance Path are required to comply with the *ENERGY STAR MFHR Testing & Verification Protocols*. The *ENERGY STAR MFHR Testing & Verification Protocols* are mandatory requirements for the inspection, testing, and verification of components related to the project's energy performance. All inspections, diagnostic tests, and photo documentation described within the Protocols are required for each of the participating project's components and systems. Results of testing and verification must be documented in the *ENERGY STAR MFHR Testing & Verification Worksheets* and *Photo Template*. The *Testing & Verification Protocols*, *Worksheets*, and *Photo Template* can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

4.3.3 ENERGY STAR MFHR Performance Path Prerequisites

Projects following the Performance Path are required to comply with *the ENERGY STAR MFHR Performance Path Prerequisites.* Though the MF NCP Performance Path is performance-based and does allow trade-offs between various building components, the *ENERGY STAR MFHR Performance Path Prerequisites* provide a lower limit to the trade-offs for many building components. The *ENERGY STAR MFHR Performance Path Prerequisites* can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

4.3.4 Simulation Guidelines

The *ENERGY STAR MFHR Simulation Guidelines* is a companion document to ASHRAE 90.1 Appendix G. It contains MF NCP requirements to assist Partners in developing the Baseline Building Design, Proposed Building Design, and As-Built models for each project. The *Simulation Guidelines* can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

All NYSERDA MF NCP projects following the Performance Path shall follow the EPA's ENERGY STAR Multifamily High Rise Simulation Guidelines, with the following revisions.

LIGHTING (Simulation Guidelines Section 3.6)

SG 3.6.2 In-unit Lighting

Replace the 1.1 W/ft2 baseline and unspecified proposed lighting power density with 0.7 W/ft2 in Simulation Guidelines Section 3.6.2, as shown below:

> SG 3.6.2.2 In the Baseline Building Design, in-unit lighting power density of 0.7 W/ft2 1.1 W/ft2 shall be incorporated into the model.
>
> SG 3.6.2.3 In the Proposed Design, in-unit lighting power density of 0.7 W/ft2 1.1 W/ft2 shall be modeled for rooms or portions of the rooms with no specified hardwired lighting.

VENTILATION AND INFILTRATION (Simulation Guidelines Section 3.12)

SG 3.12.1.2 Infiltration Rates

Replace Simulation Section 3.12.1.2 with the following:

Projects *may* pursue performance credit for air sealing. To receive this credit, the actual air leakage rate measured during the inspection phase of the project as part of the *Testing and Verification Protocols* conducted on the building, must be below 0.4 cfm/ft^2 at 75 Pa. To model the energy savings, the air leakage rate used to calculate the infiltration rates for the *Baseline Building Design* shall be 0.4 cfm/ft^2 at 75 Pa. In the Modeling submittal, the air leakage rate used to calculate the infiltration rates must be no less than 0.35 CFM/ft^2 at 75 Pa for the *Proposed Design*. In the As-Built model, the actual measured air leakage rate shall be used to calculate the infiltration rates for the *Proposed Design*. The air leakage rate of the building envelope shall be converted to appropriate units for the simulation program using one of the methods in ASHRAE 90.1-2013 Section G3.1.1.4.

Note: Currently, the ENERGY STAR MFHR Program does not allow this measure for projects following ASHRAE 90.1-2010. As such, projects following ASHRAE 90.1-2010 must be able to meet the MFHR performance rating target of 15% without this credit.

SG 3.12.2 Baseline Building Design-Ventilation

Replace Simulation Guidelines Section 3.12.2.1 and 3.12.2.2 with the following:

SG 3.12.2.1 Local Mechanical Exhaust. The Baseline Building Design local mechanical exhaust in all dwelling unit bathrooms and kitchens shall be modeled using the recommended continuous/intermittent rates as listed in ASHRAE 62.2-2010 (5 ACH/100 CFM in kitchens and 20 CFM/50 CFM in bathrooms). If not specified otherwise, intermittent exhaust shall be modeled with a 2 hr/day runtime, or converted to an equivalent 24 hr/day runtime if combined with whole-unit ventilation in the model.

SG 3.12.2.2 Whole-Unit Ventilation. The Baseline Building Design whole-unit ventilation rates in all dwelling units shall be modeled using the recommended rates as listed in ASHRAE 62.2-2010.

FAN MOTOR ENERGY (Simulation Guidelines Section 3.14)

SG 3.14.5 Demand Control Ventilation

Replace Simulation Guidelines Section 3.14.5 with the following:

SG 3.14.5.1 Enclosed Parking Garages
Exhaust fans serving enclosed parking garages may be required to have demand control ventilation as per mandatory section 6.4.3.4.5. Fan energy savings in the enclosed parking garages must be calculated as follows:

Baseline

Ebase = CFMex,base x Pfan,[W/CFM] x 365 [days/yr] x (8.4 [hrs/day] + FFLPbase x 15.6 [hrs/day])
where,
Ebase[kWh] = annual energy consumption of the baseline garage exhaust fan
CFMex,base = the lesser of specified exhaust CFM and A[ft2] x 1.5[CFM/ft2], where A is the floor area of garage

Pfan [kW/CFM]= design exhaust fan power; Pfan=0.0003
FFLPbase = Fraction of Full Load Power at reduced air flow rate (FFLP=0.5 for installations where demand control ventilation is required by Section 6.4.3.4.5; FFLP=1 for installations subject to exceptions to 6.4.3.4.5)
8.4 [hrs/day] = hours per day when exhaust fan runs at full CFMex
15.6 [hrs/day] = hours per day when contaminant level allows lower CFM

Proposed

Eprop = BHP x 0.746[kW/bhp] / Eff x365[days/yr] x (8.4 [hrs/day] + FFLPprop x 15.6 [hrs/day])
where,
Eprop[kWh] = annual energy consumption of the proposed garage exhaust fan
BHP = break horse power of specified exhaust fan
Eff = electrical efficiency of fan motor
CFMex,prop = specified design exhaust CFM
FFLPprop = fraction of Full Load Power determined from Figure 6-V of 90.1 2007 User's Manual copied below, based on the specified flow control method and the minimum Percent Design CFM, equal to the ration of design exhaust CFM and the minimum CMF allowed by the specified controls. The minimum CFM cannot be below 0.05 CFM/ft2 in enclosed parking garages, per Section 404.2 of Mechanical Code of New York State.

SG 3.14.5.2 Other Demand Control Ventilation Applications

Fan motor energy savings from other demand control ventilation applications may be modeled by reducing fan runtime in the Proposed Design compared to the Baseline. If Demand Control Ventilation is modeled in the Proposed Design, the baseline ventilation CFM must be based on the lesser of the design ventilation flow rates required by the applicable code and the actual specified flow rate. The modeled reduction in runtime hours must be documented and is subject to approval by the rating authority.

ENERGY RATE (Simulation Guidelines Section 3.16)
Replace Simulation Guidelines Section 3.16.1 with the following:

SG 3.16.1 The following average annual prices must be used for performance rating calculations of all projects:

Electricity:	0.1858 $/kWh (1)
Natural Gas:	13.22 $/Mcf (2)
Oil:	2.82 $/gallon (3)

(1) One-year state-wide average, U.S. DOE Energy Information Administration residential data. "Electric Power Monthly", summarized at https://www.nyserda.ny.gov/Cleantech-and-Innovation/Energy-Prices

(2) One-year state-wide average, U.S. DOE Energy Information Administration residential data. "Natural Gas Navigator", summarized at https://www.nyserda.ny.gov/Cleantech-and-Innovation/Energy-Prices

(3) NYSERDA, "New York Home Heating Oil Price Monitoring Program", (Posted #2 Fuel Oil Credit Price), summarized at https://www.nyserda.ny.gov/Cleantech-and-Innovation/Energy-Prices

4.4 Quality Control (QC) Processes

NYSERDA and its MF NCP Implementer perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the Performance Path.

4.4.1 Technical Reviews

The Technical Review process occurs at the Modeling and As-Built stages of each Performance Path project. The intent is to provide a thorough technical review of the submittal documents and verify that the project is meeting the performance target, in addition to meeting all requirements of the *ENERGY STAR MFHR Performance Path Prerequisites*. Failure to meet the performance target and all requirements of the *ENERGY STAR MFHR Performance Path Prerequisites* will result in termination of the project.

At any stage if the submittal is not accepted, the Technical Reviewer, a NYSERDA Contractor, will provide comments in a review document identifying the issues of each submittal revision. The Partner should review all comments, and find and correct the errors causing each identified issue or explain why an identified issue is justified. When all issues are resolved, the Partner should respond to the Technical Reviewer's comments in the review document and include it in the next revision of the submittal.

It is the Partner's responsibility to identify any modeling issues causing the identified issues and to resolve them. MF NCP staff are available to provide any needed technical assistance if the Partner is having difficulties. However, we encourage you first to use the following resources to assist you during the technical review process:

- *Partner Guidance for Technical Review Process*: This document is available to all Partners on the MF NCP Partner Portal to assist the Partner throughout the entire technical review submittal process. It includes information about internal QC procedures, common modeling issues, strategies for resolving issues, and how to verify measure savings are reasonable.

- *End Use Comparison Tool*: This tool allows Partners to compare the energy consumption of the project they are currently working on to the average energy consumption of past NYSERDA funded multifamily projects. The tool will flag any end use that falls outside of the typical range.

All Partners are expected to QC their work and to submit a high quality model along with fully completed tools and documents. Partner status may be affected if a good-faith effort is not made. If at any time during the Technical Review process the Technical Reviewer or Case Manager deems the submittal as incomplete or missing information, the submittal will be rejected and sent back to the Partner to resubmit.

At the Energy Modeling Stage, the Technical Reviewer will review the energy model, *Building Performance Plan*, and *Testing & Verification Worksheets* to verify that all requirements listed in the *ENERGY STAR MFHR Performance Path Prerequisites* have been met in addition to meeting the performance target. Additionally, the Technical Reviewer will verify that simulation outputs are

reasonable, evaluate the general quality of the model, review submittal documents to ensure that ASHRAE 90.1 Appendix G and the *ENERGY STAR MFHR Simulation Guidelines* were followed, and evaluate whether or not the projected savings are consistent with the features of the design.

At the As-Built stage, the Technical Reviewer will also review the model*, Building Performance Plan*, and *Testing & Verification Worksheets* as during the Modeling stage. Additionally, the Technical Reviewer will review the *ENERGY STAR MFHR Photo Template* to ensure that all submittals reflect the installed conditions.

4.4.2 Site Inspections

Open Wall site inspections are performed by a MF NCP Site Inspector on all Performance Path projects. This Site Inspector may be a staff member of the MF NCP Implementation Team, one of NYSERDA's Quality Assurance Contractors, or NYSERDA.

Partner and Applicant representatives are required to attend the site inspections. These representatives must have detailed knowledge of the project and must be prepared to answer any project-related questions that arise.

The Partner must submit the Open Wall Submittal to the Case Manager at least two weeks prior to the Open Wall Milestone. The Partner must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the Inspection.

The Open Wall Milestones are based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Partner may need to visit the pre-fabrication facility to complete required testing and verification. The Partner must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Partner must contact the Case Manager early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Partner fails to submit the Open Wall Submittal at least two weeks prior to the Open Wall Milestone or the Partner/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

The MF NCP Site Inspector will ask to see the construction drawings while on site to verify the planned installation of any components that the MF NCP Site Inspector cannot inspect because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Partner must submit photographs using the *ENERGY STAR MFHR Photo Template* before the Inspection Report can be approved.

The Site Inspector will inspect all installed measures from the Detailed Measures tab of the *BPP* table, as well as all installed *ENERGY STAR MFHR Performance Path Prerequisites*. The Site Inspector will develop a report detailing the Open Wall Inspection findings, which the Case Manager will return to the Partner. The report may contain Additional Requirements or Action Items for measures and prerequisites. Additional Requirements can be resolved at the As-Built submittal. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the *ENERGY STAR MFHR Performance Path Prerequisites* are discovered during this inspection, NYSERDA and its representatives reserve the right to request that the Partner instruct the construction team to remove sections of sealed walls in order to fully inspect insulation and air sealing components. Additionally, NYSERDA and its representatives reserve the right to require a second Open Wall inspection take place once all of the required corrections are complete.

Failure to meet the requirements of this Open Wall Inspection may result in termination of the project.

4.5 Additional Requirements

4.5.1 ENERGY STAR Benchmarking

Building performance is as much a function of proper building management as the design and construction. Therefore, after earning the ENERGY STAR for the project, the developer or building owner must commit to benchmarking their building in Portfolio Manager for a period of two years in order to maintain their listing on the ENERGY STAR website.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Reference Guide document at the following ENERGY STAR website: https://www.energystar.gov/ia/business/multifam_housing/QRG_Multifamily_Housing.pdf

To accomplish this goal, the developer, building owner, or an entity working on their behalf, must be capable of evaluating the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility

meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

NOTE: Receipt of NYSERDA incentives and the ENERGY STAR will not be delayed due to this EPA requirement.

4.5.2 Gut Rehabilitation Projects

Gut rehab projects following the Performance Path must meet the same requirements as newly constructed buildings. There are no allowances or exceptions for gut rehab projects under the Performance Path.

However, the Performance Path relies on the modeling requirements of ASHRAE 90.1-2010 Appendix G, as supplemented by the *Simulation Guidelines*. ASHRAE 90.1-2010 Appendix G Table G3.1, however, does allow the following adjustment: for existing building envelopes, the baseline building design shall reflect existing conditions prior to any revisions that are part of the scope of work being evaluated.

5 PASSIVE HOUSE INSTITUTE US (PHIUS)

The following section describes the requirements of the Passive House Institute US (PHIUS) path. Please reference Appendix A of this document for the PHIUS path Process Flow Chart.

5.1 Submittal Requirements

In order for the Applicant to receive the NYSERDA incentives approved for their project, the Partner must submit the required documentation as detailed in the Stages below. These submittals will be reviewed by the MF NCP Implementer and NYSERDA. The three submittal Stages are described below. The incentives will only be paid if these submittals are approved by NYSERDA. All documents listed in this section must be submitted to the project's assigned Case Manager and approved by NYSERDA.

5.1.1 Stage 1: Energy Modeling Submittal

The first NYSERDA incentive is available to the Applicant when the project has reached design completion and NYSERDA has approved the Energy Modeling Submittal. This submittal must show that the project achieves the performance thresholds and meets the requirements of the PHIUS+ Multifamily Certification Standard. If the energy model does not project the required performance thresholds, the Partner must contact the Case Manager prior to submittal. The Applicant must show that a Certified Passive House Consultant (CPHC) and a PHIUS+ Verifier have been hired to work on this project in order to be eligible for this incentive. Additionally, the project must be pre-certified by PHIUS prior to submittal to NYSERDA.

The Energy Modeling Submittal must be submitted no later than 30 days after the Buildings Department's final approval of New Building Architectural, Mechanical, and Plumbing plans. The Buildings Department's approval shall be submitted to the project's Case Manager upon receipt, but must be received by the submission of the Open Wall Submittal.

	Documents Required for Stage 1:	**Document Obtained From:**
☐	Applicant-Partner Contract (signed by both parties)	Partner created document
☐	LMI Documentation (if not previously submitted)	See Table 3.1
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal)	Permitting office that approved the Construction Documents
☐	*Passive BPP*	Partner Portal
☐	WUFI v 3.0.3.0 modeling files	PHIUS
☐	Proof of Pre-certification	PHIUS
☐	Complete Construction Documents (CDs)	Applicant/Developer/Design Team

5.1.2 Stage 2: Open Wall Submittal

The second NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall Submittal and Site Inspection Report. The Partner must submit a complete Open Wall Submittal to the Case Manager at least two weeks before the project reaches the Open Wall Milestone. This gives the MF NCP Site Inspector time to properly schedule the Open Wall inspection. The purpose of this Inspection is to verify that typical Open Wall components are installed in accordance with MF NCP

requirements. This includes measures from the proposed *Passive Building Performance Plan (Passive BPP)*.

	Documents Required for Stage 2:	Document Obtained From:
☐	*Inspection Request Form*	Partner Portal
☐	*Photo Template*	EPA
☐	*PHIUS+ Quality Control Workbook for Multifamily Projects*	PHIUS
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal) (if not previously submitted)	Permitting office that approved the Construction Documents

5.1.3 Stage 3: As-Built Submittal

The third NYSERDA incentive is available to the Applicant when the project construction is complete and NYSERDA has approved the As-Built Submittal, and *Data Release Authorization Forms* (DRAF) or Addendum 1 documents. This submittal must show that the project meets or exceeds the performance thresholds specified in its approved performance tier and meets the requirements of the PHIUS+ Multifamily Certification Standard. The submitted WUFI model file must have been reviewed and approved by PHIUS prior to submittal to NYSERDA. If the project does not meet the performance thresholds, the Partner must contact the Case Manager prior to submittal.

The Partner must work with the Applicant to determine whether to submit *DRAFs* or to follow the Addendum 1 process.

- *DRAFs*: All projects are eligible to follow the DRAF process. The Partner must submit the *Owner* and *Tenant Data Release Authorization Forms* (DRAFs), which must include utility information for all common areas of the building and a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five (5) apartments. Of the 10 percent sample, at least one of each apartment type (e.g. studio, 1 bedroom, large 1 bedroom) must be represented.

- Addendum 1: To be eligible to follow the Addendum 1 process, Con Edison must be the project's electric and/or gas utility. The *Addendum 1 Contract* gives the MF NCP Implementer access to the project's Con Edison accounts and allows the Implementer to request and obtain data from Con Edison on the Applicant's behalf. This replaces the need for *Tenant Data Release Authorization Forms*. The Partner must request a draft *Addendum 1 Contract* from their Case Manager and they must forward it to the Applicant for signature. The Applicant must sign two copies of the *Addendum 1 Contract*, which the Applicant or the Partner will mail to the Case Manager. The Applicant must complete the *Owner Data Release Authorization Form*, sign the Con Edison Letter of Authorization and send a copy of the building's Con Edison bill to the Partner. The Partner must then complete the application tab of Con Edison's Aggregated Consumption Data Request form, compile all documents, and submit to the Case Manager.

By opting to follow this alternative, the Applicant authorizes NYSERDA to withhold $307.50* per borough-block-lot number (BBL#) from the final payment via an Addendum 1 (the number of BBL#s are determined by the Department of Buildings). The money withheld from the final payment offsets the cost incurred by NYSERDA to obtain the data from Con Edison All data is kept confidential as per NYSERDA's guidelines and regulations, and only used to estimate the energy performance of the building as a whole, not of individual apartments.

	Documents Required for Stage 3:	**Document Obtained From:**
☐	As-Built Passive BPP	Partner Portal
☐	*Photo Template*	EPA
☐	*PHIUS+ Quality Control Workbook for Multifamily Projects*	PHIUS
☐	WUFI v 3.0.3.0 modeling files	PHIUS
☐	PHIUS+ Certificate	PHIUS

DRAF Documents (not required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	*Tenant Data Release Authorization Forms* (executed)	Partner Portal
☐	List of each apartment number and type (e.g., studio, 1 bedroom)	Partner created document

Addendum 1 Documents (only required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	Signed *Addendum 1 Contract* (Email scanned copy and mail 2 original hard copies)	Case Manager created document
☐	Con Edison Letter of Authorization*	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Con Edison Spreadsheet - Aggregated Consumption Data Request	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Copy of Con Edison bill for project address and account numbers	Applicant/Developer
☐	Partner must provide "lease-up" date (date when the building will be occupied)	Partner/Applicant

* The signatory of this Authorization Form must be the Con Edison utility account holder

5.2 Software Requirements

All MF NCP projects pursuing the PHIUS path must model the project using WUFI Version 3.0.3 and following PHIUS+ Multifamily Certification Standard Book V1.01. The use of other versions of WUFI software or certification standard is subject to MF NCP review, must receive pre-approval by NYSERDA, and may result in a change to the performance threshold.

5.3 Associated Documents

5.3.1 Passive Building Performance Plan

The *Passive Building Performance Plan* (Passive BPP) is a comprehensive reporting tool that provides details regarding the project's scope of work and achievement of the performance thresholds. In addition, the *Passive BPP* collects general information about the project, cost information about the project, and verification that a Certified Passive House Consultant (CPHC) and a PHIUS+ Verifier have been hired by the Applicant.

5.3.2 Testing & Verification documents

In addition to following all requirements of the PHIUS Passive House certification, projects following the PHIUS path are also required to document the results of testing and verification in the *ENERGY STAR MFHR Photo Template.* The *Photo Template* can be obtained from the following ENERGY STAR website:
https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

5.4 Quality Control (QC) Processes

NYSERDA and its MF NCP Implementer perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the PHIUS path.

5.4.1 Technical Review

The Technical Review process occurs at the Modeling and As-Built stages of each PHIUS path project. The intent is to provide a thorough technical review of the submittal documents and verify that the project is meeting all MF NCP requirements. Failure to meet the performance thresholds and all MF NCP requirements will result in termination of the project.

At any stage, if the submittal is not accepted, the Technical Reviewer, a NYSERDA Contractor, will provide comments in a review document identifying the issues of each submittal revision. The Partner should review all comments, and find and correct the errors causing each identified issue or explain why an identified issue is justified. When all issues are resolved, the Partner should respond to the Technical Reviewer's comments in the review document and include it in the next revision of the submittal.

All Partners are expected to QC their work and to submit a high quality model along with fully completed tools and documents. Partner status may be affected if a good-faith effort is not made. If at any time during the Technical Review process the Technical Reviewer or Case Manager deems the submittal as incomplete or missing significant information, the submittal will be rejected and sent back to the Partner to resubmit.

At the Modeling Stage, the Technical Reviewer will review the model, the *Passive Building Performance Plan*, and *PHIUS+ Quality Control Workbook for Multifamily Projects* to verify that all MF NCP requirements have been met, in addition to meeting the performance thresholds. Additionally, the Technical Reviewer will verify that simulation outputs are reasonable, evaluate the general quality of the model, and evaluate whether or not the projected savings are consistent with the features of the design.

At the As-Built stage, the Technical Reviewer will also review the model, the *Passive Building Performance Plan*, and *PHIUS+ Quality Control Workbook for Multifamily Projects* as during the Modeling stage. Additionally, the Technical Reviewer will review the *ENERGY STAR MFHR Photo Template* to ensure that all submittals reflect the installed conditions.

5.4.2 Site Inspections

Open Wall inspections are performed by a MF NCP Site Inspector on all PHIUS path projects. This Site Inspector may be a staff member of the MF NCP Implementation Team, one of NYSERDA's Quality Assurance Contractors, or NYSERDA.

Partner and Applicant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must also be prepared to answer any project-related questions that arise.

The Partner must submit the Open Wall Submittal to the Case Manager at least two weeks prior to the Open Wall Milestone. The Partner must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the Inspection.

The Open Wall Milestones are based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Partner may need to visit the pre-fabrication facility to complete required testing and verification. The Partner must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Partner must contact the Case Manager early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Partner fails to submit the Open Wall Submittal at least two weeks prior to the Open Wall Milestone or the Partner/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

The MF NCP Site Inspector will ask to see the construction drawings while on site to verify any component listed on the Open Wall Checklist that the MF NCP Site Inspector cannot inspect because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Partner must submit photographs using the *ENERGY STAR MFHR Photo Template* before the Inspection Report can be approved.

The Site Inspector will inspect all installed measures from the *Passive BPP*. The Site Inspector will develop a report detailing the Open Wall Inspection findings, which the Case Manager will return to the Partner. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built submittal. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the *Passive BPP* are discovered during this inspection, NYSERDA and its representatives reserve the right to request that the Partner instruct the construction team to remove sections of sealed walls in order to fully inspect insulation and air sealing components. Additionally, NYSERDA and its representatives reserve the right to require a second Open Wall inspection take place once all of the required corrections are complete.

Failure to meet the requirements of this Open Wall Inspection may result in termination of the project

5.5 Additional Requirements

5.5.1 Modeling Guidelines

All MF NCP projects following the PHIUS path shall follow the PHIUS+ Multifamily Certification Standard Book V1.01, with the following revisions:

- When calculating the Primary Energy Demand metric to determine a project's compliance with the performance thresholds specified in its approved performance tier, the project may choose to exclude the energy use associated with optional amenities, including dishwashers, laundry facilities, and exterior lighting. If excluded, however, that component must, at minimum, meet the modified prescriptive path requirement for that component as defined in the *Modified Prescriptive Path Requirements* (e.g., dishwashers and clothes washers must be ENERGY STAR® certified). Additional optional amenities, such as vending machines, on-site gym equipment, etc. may be excluded with prior NYSERDA approval.
- Any deviations from program defaults for operating assumptions, such as site-to-source conversion, plug loads and hours of operation, are subject to review and must be specifically noted in the *Passive BPP*.
- If a project includes an HVAC configuration or system type that cannot be explicitly modeled in the WUFI software, the Partner or CPHC must work directly with PHIUS staff to ensure that the energy use of that system is accurately captured in the model.
- Any calculations performed outside of the approved version of WUFI, including but not limited to HVAC systems that are not directly supported, capturing power of continuously running fans integral to heating/cooling units, methodology for aggregating heating systems of different type /efficiency for input into WUFI, etc. must be included in the NYSERDA submittal and are subject to NYSERDA approval.

5.5.2 ENERGY STAR Benchmarking

NYSERDA requires benchmarking for all PHIUS path projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Reference Guide document at the following ENERGY STAR website: https://www.energystar.gov/ia/business/multifam_housing/QRG_Multifamily_Housing.pdf

To accomplish this goal, the developer, building owner, or an entity working on their behalf, must be capable of evaluating the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

6 PASSIVE HOUSE INSTITUTE (PHI)

The following section describes the requirements of the Passive House Institute (PHI) path. Please reference Appendix A of this document for the PHI Path Process Flow Chart.

6.1 Submittal Requirements

In order for the Applicant to receive the NYSERDA incentives approved for their project, the Partner must submit the required documentation as detailed in the Stages below. These submittals will be reviewed by the MF NCP Implementer and NYSERDA. The three submittal Stages are described below. The incentives will only be paid if these submittals are approved by NYSERDA. All documents listed in this section must be submitted to the project's assigned Case Manager and approved by NYSERDA.

6.1.1 Stage 1: Energy Modeling Submittal

The first NYSERDA incentive is available to the Applicant when the project has reached design completion and NYSERDA has approved the Energy Modeling Submittal. This submittal must show that the project achieves the primary energy demand thresholds and meets the requirements of PHI Passive House standard. If the energy model does not project the performance threshold, the Partner must contact the Case Manager prior to submittal. The Applicant must show that a PHI Consultant or Designer and PHI Certifier have been hired to work on this project in order to be eligible for this incentive. Additionally, the submitted PHPP modeling file must have been reviewed and found to be compliant with the PHI standard by both the PHI Consultant or Designer and Certifier prior to submittal to NYSERDA.

The Energy Modeling Submittal must be submitted no later than 30 days after the Buildings Department's final approval of New Building Architectural, Mechanical, and Plumbing plans. The Buildings Department's approval shall be submitted to the project's Case Manager upon receipt, but must be received by the submission of the Open Wall Submittal.

	Documents Required for Stage 1:	**Document Obtained From:**
☐	Applicant-Partner Contract (signed by both parties)	Partner created document
☐	LMI Documentation (if not previously submitted)	See Table 3.1
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal)	Permitting office that approved the Construction Documents
☐	Proof of Pre-certification	PHI
☐	*Passive BPP*	Partner Portal
☐	PHPP v9.5 modeling files	PHI
☐	Complete Construction Documents (CDs)	Applicant/Developer/Design Team

6.1.2 Stage 2: Open Wall Submittal

The second NYSERDA incentive is available to the Applicant when NYSERDA has approved the Open Wall Submittal and Site Inspection Report. The Partner must submit a complete Open Wall Submittal to the Case Manager at least two weeks before the project reaches the Open Wall Milestone. This gives the MF NCP Site Inspector time to properly schedule the Open Wall inspection. The purpose of this Inspection is to verify that typical Open Wall components are installed in accordance with MF NCP

requirements. This includes measures from the proposed *Passive Building Performance Plan (Passive BPP)*.

	Documents Required for Stage 2:	Document Obtained From:
☐	*Inspection Request Form*	Partner Portal
☐	*Photo Template*	EPA
☐	*Testing & Verification Worksheets*	EPA
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal) (if not previously submitted)	Permitting office that approved the Construction Documents

6.1.3 Stage 3: As-Built Submittal

The third NYSERDA incentive is available to the Applicant when the project construction is complete and NYSERDA has approved the As-Built Submittal, and *Data Release Authorization Forms* (DRAF) or Addendum 1 documents. This submittal must show that the project meets or exceeds the performance thresholds specified in its approved performance tier and meets the requirements of the PHI Passive House standard. The submitted PHPP model file must have been reviewed and approved by both the PHI Consultant/Designer and Certifier prior to submittal to NYSERDA. If the project does not meet the performance thresholds, the Partner must contact the Case Manager prior to submittal.

The Partner must work with the Applicant to determine whether to submit *DRAFs* or to follow the Addendum 1 process.

- *DRAFs*: All projects are eligible to follow the DRAF process. The Partner must submit the *Owner* and *Tenant Data Release Authorization Forms* (DRAFs), which must include utility information for all common areas of the building and a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five (5) apartments. Of the 10 percent sample, at least one of each apartment type (e.g. studio, 1 bedroom, large 1 bedroom) must be represented.

- Addendum 1: To be eligible to follow the Addendum 1 process, Con Edison must be the project's electric and/or gas utility. The *Addendum 1 Contract* gives the MF NCP Implementer access to the project's Con Edison accounts and allows the Implementer to request and obtain data from Con Edison on the Applicant's behalf. This replaces the need for *Tenant Data Release Authorization Forms*. The Partner must request a draft *Addendum 1 Contract* from their Case Manager and they must forward it to the Applicant for signature. The Applicant must sign two copies of the *Addendum 1 Contract*, which the Applicant or the Partner will mail to the Case Manager. The Applicant must complete the *Owner Data Release Authorization Form*, sign the Con Edison Letter of Authorization and send a copy of the building's Con Edison bill to the Partner. The Partner must then complete the application tab of Con Edison's Aggregated Consumption Data Request form, compile all documents, and submit to the Case Manager.

  By opting to follow this alternative, the Applicant authorizes NYSERDA to withhold $307.50* per borough-block-lot number (BBL#) from the final payment via an Addendum 1 (the number of BBL#s are determined by the Department of Buildings). The money withheld from the final payment offsets the cost incurred by NYSERDA to obtain the data from Con Edison. All data is kept

confidential as per NYSERDA's guidelines and regulations, and only used to estimate the energy performance of the building as a whole, not of individual apartments.

	Document Required for Stage 3:	Document Obtained From:
☐	As-Built Passive BPP	Partner Portal
☐	*Photo Template*	EPA
☐	*Testing & Verification Worksheets*	EPA
☐	PHPP v9.5 modeling files	PHI
☐	PHI Certificate	PHI

DRAF Documents (not required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	*Tenant Data Release Authorization Forms* (executed)	Partner Portal
☐	List of each apartment number and type (e.g., studio, 1 bedroom)	Partner created document

Addendum 1 Documents (only required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	Signed *Addendum 1 Contract* (Email scanned copy and mail 2 original hard copies)	Case Manager created document
☐	Con Edison Letter of Authorization*	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Con Edison Spreadsheet - Aggregated Consumption Data Request	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Copy of Con Edison bill for project address and account numbers	Applicant/Developer
☐	Partner must provide "lease-up" date (date when the building will be occupied)	Partner/Applicant

* The signatory of this Authorization Form must be the Con Edison utility account holder

6.2 Software Requirements

All MF NCP projects pursuing the PHI path must model the project using PHPP Version 9.5 and following PHI Passive House Standard v9.5 – PH Classic. The use of other versions of PHPP software or certification standard is subject to MF NCP review, must receive pre-approval by NYSERDA, and may result in a change to the performance thresholds.

6.3 Associated Documents

6.3.1 Passive Building Performance Plan

The *Passive Building Performance Plan* (Passive BPP) is a comprehensive reporting tool that provides details regarding the project's scope of work and achievement of the performance thresholds. In addition, the *Passive BPP* collects general information about the project, cost information about the project, and verification that a PHI Consultant or Designer and a PHI Certifier have been hired by the Applicant.

6.3.2 Testing and Verification Worksheets

MF NCP projects following the PHI compliance path are required to report all performance testing results in the *ENERGY STAR MFHR Testing & Verification Worksheets* and *Photo Template*. Note that where the requirements stated in the *Testing & Verification Worksheets* conflict with PHI requirements, the PHI requirement stands.

The *Testing & Verification Worksheets* and *Photo Template* can be obtained from the following ENERGY STAR website:
https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

6.4 Quality Control (QC) Processes

NYSERDA and its MF NCP Implementer perform two different types of QC on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the PHI path.

6.4.1 Technical Review

The Technical Review process occurs at the Modeling and As-Built stages of each PHI path project. The intent is to provide a thorough technical review of the submittal documents and verify that the project is meeting all MF NCP requirements. Failure to meet the performance thresholds and all MF NCP requirements will result in termination of the project.

At any stage, if the submittal is not accepted, the Technical Reviewer, a NYSERDA Contractor, will provide comments in a review document identifying the issues of each submittal revision. The Partner should review all comments, and find and correct the errors causing each identified issue or explain why an identified issue is justified. When all issues are resolved, the Partner should respond to the Technical Reviewer's comments in the review document and include it in the next revision of the submittal.

All Partners are expected to QC their work and to submit a high quality model along with fully completed tools and documents. Partner status may be affected if a good-faith effort is not made. If at any time during the Technical Review process the Technical Reviewer or Case Manager deems the submittal as incomplete or missing information, the submittal will be rejected and sent back to the Partner to resubmit.

At the Modeling Stage, the Technical Reviewer will review the model, the *Passive Building Performance Plan*, and *Testing & Verification Worksheets* to verify that all MF NCP requirements have been met, in addition to meeting the performance thresholds. Additionally, the Technical Reviewer will verify that simulation outputs are reasonable, evaluate the general quality of the model, and evaluate whether or not the projected savings are consistent with the features of the design.

At the As-Built stage, the Technical Reviewer will also review the model, the *Passive Building Performance Plan*, and *Testing & Verification Worksheets* as during the Modeling stage. Additionally, the Technical Reviewer will review the *ENERGY STAR MFHR Photo Template* to ensure that all submittals reflect the installed conditions.

6.4.2 Site Inspections

Open Wall inspections are performed by a MF NCP Site Inspector on all PHI path projects. This Site Inspector may be a staff member of the MF NCP Implementation Team, Quality Assurance Contractor, or NYSERDA.

Partner and Applicant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must also be prepared to answer any project-related questions that arise.

The Partner must submit the Open Wall Submittal to the Case Manager at least two weeks prior to the Open Wall Milestone. The Partner must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the Inspection.

The Open Wall Milestones are based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Partner may need to visit the pre-fabrication facility to complete required testing and verification. The Partner must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Partner must contact the Case Manager early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Partner fails to submit the Open Wall Submittal at least two weeks prior to the Open Wall Milestone or the Partner/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

The MF NCP Site Inspector will ask to see the construction drawings while on site to verify any component listed on the Open Wall Checklist that the MF NCP Site Inspector cannot inspect because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Partner must submit photographs using the *ENERGY STAR MFHR Photo Template* before the Inspection Report can be approved.

The Site Inspector will inspect all installed measures from the *Passive BPP*. The Site Inspector will develop a report detailing the Open Wall Inspection findings, which the Case Manager will return to the Partner. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built submittal. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the *Passive BPP* are discovered during this inspection, NYSERDA and its representatives reserve the right to request that the Partner instruct the construction team to remove sections of sealed walls in order to fully inspect insulation and air sealing components. Additionally, NYSERDA and its representatives reserve the right to require a second Open Wall inspection take place once all of the required corrections are complete.

Failure to meet the requirements of this Open Wall Inspection may result in termination of the project.

6.5 Additional Requirements

6.5.1 Modeling Guidelines

All MF NCP projects following the PHI path shall follow the PHI Passive House Standard v9.5 – PH Classic, with the following revisions.

- When calculating the Primary Energy Demand metric to determine a project's compliance with the performance thresholds specified in its approved performance tier, the project may choose to exclude the energy use associated with optional amenities, including dishwashers, laundry facilities, and exterior lighting. If excluded, however, that component must, at minimum, meet the modified prescriptive path requirement for that component as defined in the *Modified Prescriptive Path Requirements* (e.g., dishwashers and clothes washers must be ENERGY STAR® certified). Additional optional amenities, such as vending machines, on-site gym equipment, etc., may be excluded with prior NYSERDA approval.
- Any deviations from program defaults for operating assumptions, such as site-to-source conversion, plug loads and hours of operation, are subject to review and must be specifically noted in the *Passive BPP*.
- If a project includes an HVAC configuration or system type that cannot be explicitly modeled in the PHPP software, the project team must work directly with PHI staff to ensure that the energy use of that system is accurately captured in the model.
- Any calculations performed outside of the approved version of PHPP, including but not limited to HVAC systems that are not directly supported, capturing power of continuously running fans integral to heating/cooling units, methodology for aggregating heating systems of different type /efficiency for input into PHPP, etc. must be included in the NYSERDA submittal and are subject to NYSERDA approval.

6.5.2 ENERGY STAR Benchmarking

NYSERDA requires benchmarking for all PHI path projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Reference Guide document at the following ENERGY STAR website: https://www.energystar.gov/ia/business/multifam_housing/QRG_Multifamily_Housing.pdf

To accomplish this goal, the developer, building owner, or an entity working on their behalf, must be capable of evaluating the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

7 MODIFIED PRESCRIPTIVE PATH (MOPP)

The following section describes the requirements for the MoPP. This compliance path does not result in an ENERGY STAR label for the final project's units, but may result in the New York Energy $mart designation from NYSERDA. Please reference Appendix A of this document for the Modified Prescriptive Path Process Flow Chart.

Projects following this path must comply with the *Modified Prescriptive Path Requirements* and the *ENERGY STAR MFHR Testing & Verification Protocols*.

New Construction projects following the MoPP will be eligible for Tier 1 only. Gut rehabs following the MoPP will be eligible for Tier 2.

7.1 Submittal Requirements

In order for the Applicant to receive the NYSERDA incentives approved for their project, the Partner must submit the required documentation as detailed in the States below. These submittals will be reviewed by the MF NCP Implementer and NYSERDA. The three submittal Stages are described below. The incentives will only be paid if these submittals are approved by NYSERDA. All documents listed in this section must be submitted to the project's assigned Case Manager and approved by NYSERDA.

7.1.1 Stage 1: Modified Prescriptive Path Calculator

The submittal must show that the project achieves the performance target and meets the requirements detailed in the *Modified Prescriptive Path Requirements* and the *ENERGY STAR MFHR Testing & Verification Protocols*. Note there are no incentives associated with this submittal.

These submittal documents must be submitted prior to, or with, the Open Wall Submittal.

	Document	Document Obtained From
☐	Applicant-Partner Contract (signed by both parties)	Partner created document
☐	LMI Documentation (if not previously submitted)	See Table 3.1
☐	*Proposed Modified Prescriptive Path Calculator*	Partner Portal
☐	Complete Construction Documents (CDs)	Applicant/Developer/Design Team
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal)	Permitting office that approved the Construction Documents

7.1.2 Stage 2: Open Wall Submittal

For the MoPP, the first NYSERDA incentive is available to the Applicant when the project has an approved Open Wall Site Inspection performed by NYSERDA or MF NCP Implementation staff. The Partner must submit the Open Wall Submittal to the Case Manager at least two weeks before the project achieves the Open Wall Milestone in order to properly schedule an inspection. The purpose of the Open Wall Inspection is for the MF NCP Site Inspector to verify that typical Open Wall components

– measures of the *Modified Prescriptive Path Requirements* and the *ENERGY STAR MFHR Testing & Verification Protocols* – are installed in accordance with MF NCP requirements.

	Document	Document Obtained From
☐	Inspection Request Form	Partner Portal
☐	Photo Template	EPA
☐	Testing & Verification Worksheets	EPA
☐	Buildings Department's final New Building approval of Architectural, Mechanical, and Plumbing plans (if available at the time of submittal) (if not previously submitted)	Permitting office that approved the Construction Documents

7.1.3 Stage 3: As-Built Submittal

The second incentive is available to the Applicant when the project construction is complete and NYSERDA has approved the As-Built Submittal, and approved *Data Release Authorization Forms* or Addendum 1 documents. The As-Built Submittal must show that the project has complied with all *Modified Prescriptive Path Requirements* and the *ENERGY STAR MFHR Testing & Verification Protocols*.

The Partner must work with the Applicant to determine whether to submit *DRAFs* or to follow the Addendum 1 process.

- *DRAFs*: All projects are eligible to follow the DRAF process. The Partner must submit the *Owner* and *Tenant Data Release Authorization Forms* (DRAFs), which must include utility information for all common areas of the building and a representative sample of apartments. The apartment sample shall consist of at least 10 percent of the apartments with no fewer than five (5) apartments. Of the 10 percent sample, at least one of each apartment type (e.g. studio, 1 bedroom, large 1 bedroom) must be represented.

- Addendum 1: To be eligible to follow the Addendum 1 process, Con Edison must be the project's electric and/or gas utility. The *Addendum 1 Contract* gives the MF NCP Implementer access to the project's Con Edison accounts and allows the Implementer to request and obtain data from Con Edison on the Applicant's behalf. This replaces the need for *Tenant Data Release Authorization Forms*. The Partner must request a draft *Addendum 1 Contract* from their Case Manager and they must forward it to the Applicant for signature. The Applicant must sign two copies of the *Addendum 1 Contract*, which the Applicant or the Partner will mail to the Case Manager. The Applicant must complete the *Owner Data Release Authorization Form*, sign the Con Edison Letter of Authorization and send a copy of the building's Con Edison bill to the Partner. The Partner must then complete the application tab of Con Edison's Aggregated Consumption Data Request form, compile all documents, and submit to the Case Manager.

  By opting to follow this alternative, the Applicant authorizes NYSERDA to withhold $307.50* per borough-block-lot number (BBL#) from the final payment via an Addendum 1 (the number of BBL#s are determined by the Department of Buildings). The money withheld from the final payment offsets the cost incurred by NYSERDA to obtain the data from Con Edison. All data is kept strictly

confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

	Document	Document Obtained From
☐	*As-Built Modified Prescriptive Path Calculator*	Partner Portal
☐	*Photo Template*	EPA
☐	*Testing & Verification Worksheets*	EPA

Required DRAF Documents (not required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)*	Partner Portal
☐	*Tenant Data Release Authorization Forms* (executed)	Partner Portal
☐	List of each apartment number and type (e.g., studio, 1 bedroom)	Partner created document

Required Addendum 1 Documents (only required if pursuing Addendum 1)

☐	*Owner Data Release Authorization Forms* (for all common area utility accounts) (executed)	Partner Portal
☐	Signed *Addendum 1 Contract* (Email scanned copy and mail 2 original hard copies)	Case Manager created document
☐	Con Edison Letter of Authorization*	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Con Edison Spreadsheet - Aggregated Consumption Data Request	http://www.coned.com/energyefficiency/city_benchmarking.asp
☐	Copy of Con Edison bill for project address and account numbers	Applicant/Developer
☐	Partner must provide "lease-up" date (date when the building will be occupied)	Partner/Applicant

* The signatory of this Authorization Form must be the Con Edison utility account holder

7.2 Associated Documents

7.2.1 Modified Prescriptive Path Calculator

In lieu of submitting the *Building Performance Plan*, MoPP projects must submit the *Modified Prescriptive Path Calculator*. This calculator includes a checklist where the Partner and Applicant confirm that all *Modified Prescriptive Path Requirements* and *ENERGY STAR MFHR Testing & Verification Protocols* are met. It also calculates estimated savings based on project-specific data for NYSERDA reporting purposes. It incorporates the *ENERGY STAR MFHR Testing & Verification Worksheets*, as well as tabs that report information to NYSERDA. There is extensive linking between the tabs in this document to reduce the amount of data entry required of the Partner.

The cells and tabs are color-coded to guide the Partner in properly filling in the calculator. All cells that require the Partner to input information are blue.

- *Modified Prescriptive Path Checklist*: This tab outlines the Modified Prescriptive Path Requirements in checklist form. In addition to checking each box to indicate that the requirement has been met, certain components require basic information be entered. These cells are colored blue.

- *Savings*: This tab calculated the savings of each measure and the project as a whole, based on MF NCP-wide assumptions. No information should be changed in this sheet, it is for informational purposes only.

- *Testing & Verification Worksheets (Remainder of the tabs):* After the final plan review confirms all recommendations have been integrated into the construction documents, the *T&V Worksheets* are intended to be printed and brought to the field. They list the measures and building components to be inspected, mandatory requirements to be confirmed, and any additional relevant information identified during the plan review. Once completed, they are used to document that each Modified Prescriptive Path requirement and each measure included in the As-Built Building meets all requirements and follows *T&V Protocols*.

7.2.2 Testing and Verification Protocols and Worksheets

Projects following the Modified Prescriptive Path are required to comply with the *ENERGY STAR MFHR Testing & Verification Protocols*. The *ENERGY STAR MFHR Testing & Verification Protocols* are mandatory requirements for the inspection, testing, and verification of components related to the project's energy performance. All inspections, diagnostic tests, and photo documentation described within the Protocols are required for each of the participating project's components and systems. Results of testing and verification must be documented in the *ENERGY STAR MFHR Testing & Verification Worksheets* (included in the *Modified Prescriptive Path Calculator*) and *Photo Template*. The *Testing & Verification Protocols* and *Photo Template* can be obtained from the following ENERGY STAR website: https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_guidance

7.3 Quality Control Processes

NYSERDA and its MF NCP Implementer perform two different types of quality control on each MF NCP project: technical reviews and site inspections. This section explains how these apply to projects following the Modified Prescriptive Path.

7.3.1 Technical Reviews

The Technical Review process occurs at the *Modified Prescriptive Path Calculator* submittal stage and As-Built stages of each Modified Prescriptive Path project. The intent is to provide a thorough technical review of the submittal documents and to verify compliance with the *Modified Prescriptive Path Requirements*. The Technical Reviewers focus on identifying errors within the *Modified Prescriptive Path Calculator*. Failure to meet the *Modified Prescriptive Path Requirements* will result in termination of the project.

At the *Modified Prescriptive Path Calculator* submittal stage, the Technical Reviewer, a NYSERDA Contractor, will review all inputs made in the *Modified Prescriptive Path Calculator* to determine that they are complete and reasonable. Additionally, the Technical Reviewer will verify that all requirements listed in the *Modified Prescriptive Path Requirements* have been met.

At the As-Built stage, the Technical Reviewer will also be reviewing the *Modified Prescriptive Path Calculator* in comparison to the *Photo Template* to ensure that all inputs and photos reflect the actual and installed conditions.

At any stage if the submittal is not accepted, the Technical Reviewer will provide comments in a review document identifying the issues of each submittal revision. The Partner should review all comments,

and find and correct the errors causing each identified issue or explain why an identified issue is justified. When all issues are resolved, the Partner should respond to the Technical Reviewer's comments in the review document and include it in the next revision of the submittal.

All Partners are expected to QC their work and submit high quality and fully completed tools and documents. Partner status may be affected if a good-faith effort is not made. If at any time during the Technical Review process the Technical Reviewer or Case Manager deems the submittal as incomplete or missing information, the submittal will be rejected and sent back to the Partner to resubmit.

7.3.2 Site Inspections

Open Wall inspections are performed by a MF NCP Site Inspector on all Modified Prescriptive Path projects. This Site Inspector may be a staff member of the MF NCP Implementation Team, the Quality Assurance Contractor, or NYSERDA.

Partner and Applicant representatives are required to attend these site inspections. These representatives must have detailed knowledge of the project and must also be prepared to answer any project-related questions that arise.

The Partner must submit the Open Wall Submittal to the Case Managers at least two weeks prior to the Open Wall Milestone. The Partner must remain in communication with the construction site superintendent or construction manager regarding the construction schedule and any anticipated deviations that may affect the Inspection.

The Open Wall Milestones are based on the type of installed above-grade wall insulation:

- Exterior insulation: Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Insulated concrete form (ICF): Inspection should occur when approximately 30% of windows have been installed. This allows the MF NCP Site Inspector to view cross sections of the above-grade wall assemblies at window rough openings, as well as air-sealing details at installed windows.
- Exterior Insulation and Finishing Systems (EIFS): Inspection should occur when 30% of the EIFS has been installed.
- Interior insulation only: Inspection should occur when 30% of insulation is installed and visible.
- Exterior insulation with interior insulation: Inspection should occur when 30% of interior insulation is installed and visible.
- Pre-fabricated exterior wall assemblies and modular construction: Inspection should occur when 30% of the pre-fabricated assemblies have been installed on-site. The Partner may need to visit the pre-fabrication facility to complete required testing and verification. The Partner must provide photo documentation of components that will not be visible during the Open Wall inspection.

The Partner must contact the Case Manager early in construction to determine the Open Wall Milestone for projects with above-grade wall insulation types or combinations not listed here.

If the Partner fails to submit the Open Wall Submittal at least two weeks prior to the Open Wall Milestone or the Partner/Applicant is unresponsive to attempts to schedule the Open Wall inspection, the project will be required to expose sections of walls for inspection and all remaining incentive payments will be in jeopardy.

The MF NCP Site Inspector will ask to see the construction drawings while on site to verify any component listed on the Open Wall Checklist that the MF NCP Site Inspector cannot inspect because either it has been covered or installation has not commenced.

For any completed component no longer visible during the inspection (below-grade exterior insulation, roof insulation, pre-fabricated assembly items, etc.), the Partner must submit photographs using the *ENERGY STAR MFHR Photo Template* before the Inspection Report can be approved.

The Site Inspector will inspect all installed measures from the *Modified Prescriptive Path Calculator*, as well as all installed *Modified Prescriptive Path Requirements*. The Site Inspector will develop a report detailing the Open Wall Inspection findings, which the Case Manager will return to the Partner. The report may contain Additional Requirements or Action Items for measures and prerequisites or requirements. Additional Requirements can be resolved at the As-Built submittal. Action Items must be resolved before the Open Wall Incentive can be paid. The report will provide an explanation of what is required to resolve Additional Requirements and Action Items.

If severe violations of the *Modified Prescriptive Path Requirements* are discovered during this inspection, NYSERDA and its representatives reserve the right to request that the Partner instruct the construction team to remove sections of sealed walls in order to fully inspect insulation and air sealing components. Additionally, NYSERDA and its representatives reserve the right to require a second Open Wall inspection take place once all of the required corrections are complete.

Failure to meet the requirements of this Open Wall Inspection will result in termination of the project.

7.4 Additional Requirements

7.4.1 Energy Star Benchmarking

NYSERDA requires benchmarking for all MoPP projects. Building performance is as much a function of proper building management as the energy conservation measures incorporated into the structure. Therefore, after completing the MF NCP, the developer or building owner must commit to benchmarking their building in Portfolio Manager.

Portfolio Manager is an online, interactive energy management tool that allows Applicants to measure and track their building's energy and water consumption, identify investment priorities, and verify improvements over time. Multifamily housing communities can use Portfolio Manager to track weather-normalized energy use intensity (EUI), energy costs, greenhouse gas emissions, and water consumption. For more information on how to use Portfolio Manager, see the Portfolio Manager – Multifamily Housing Quick Reference Guide document at the following ENERGY STAR website: https://www.energystar.gov/ia/business/multifam_housing/QRG_Multifamily_Housing.pdf

To accomplish this goal, the developer, building owner, or an entity working on their behalf, must be capable of evaluating the utility consumption of the residential-associated spaces independent of any commercial/retail space. These non-residential associated parts of the building shall be separately metered (or sub-metered) for electricity, gas, fuel oil, water, steam, and hot water for domestic and/or space heating purposes. The developer or building owner should also work with tenants to secure consumption information. If the building is direct-metered for utilities to the apartments, the building owner must secure signed releases from individual apartment occupants to allow for benchmarking. In

addition, the building owner must provide a signed release for the common area/whole-building utility meters. All data uploaded to Portfolio Manager is strictly confidential and only used to estimate the energy performance of the building as a whole, not of individual apartments.

7.4.2 Gut Rehabilitation Projects

Gut rehabilitations following the Modified Prescriptive Path must meet the requirements listed in *Modified Prescriptive Path Requirements and ENERGY STAR MFHR Testing & Verification Protocols*, with the following exceptions:

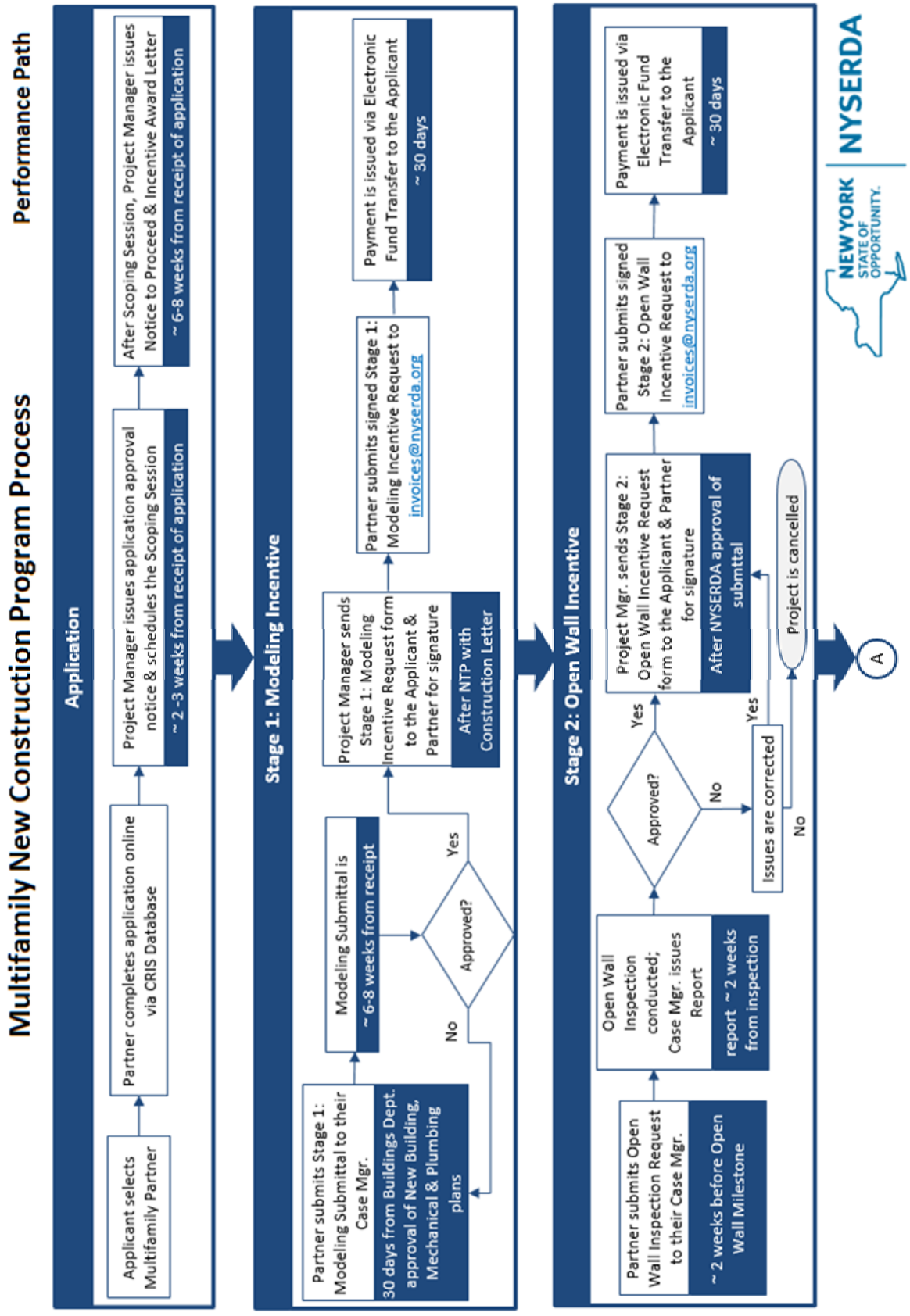
Envelope and Compartmentalization Requirements

Gut rehab projects are excluded from complying with the Envelope Section and all compartmentalization requirements of the table in the *Modified Prescriptive Path Requirements* provided the assembly is not included within the scope of work or modified in any way during construction.

Historic Buildings

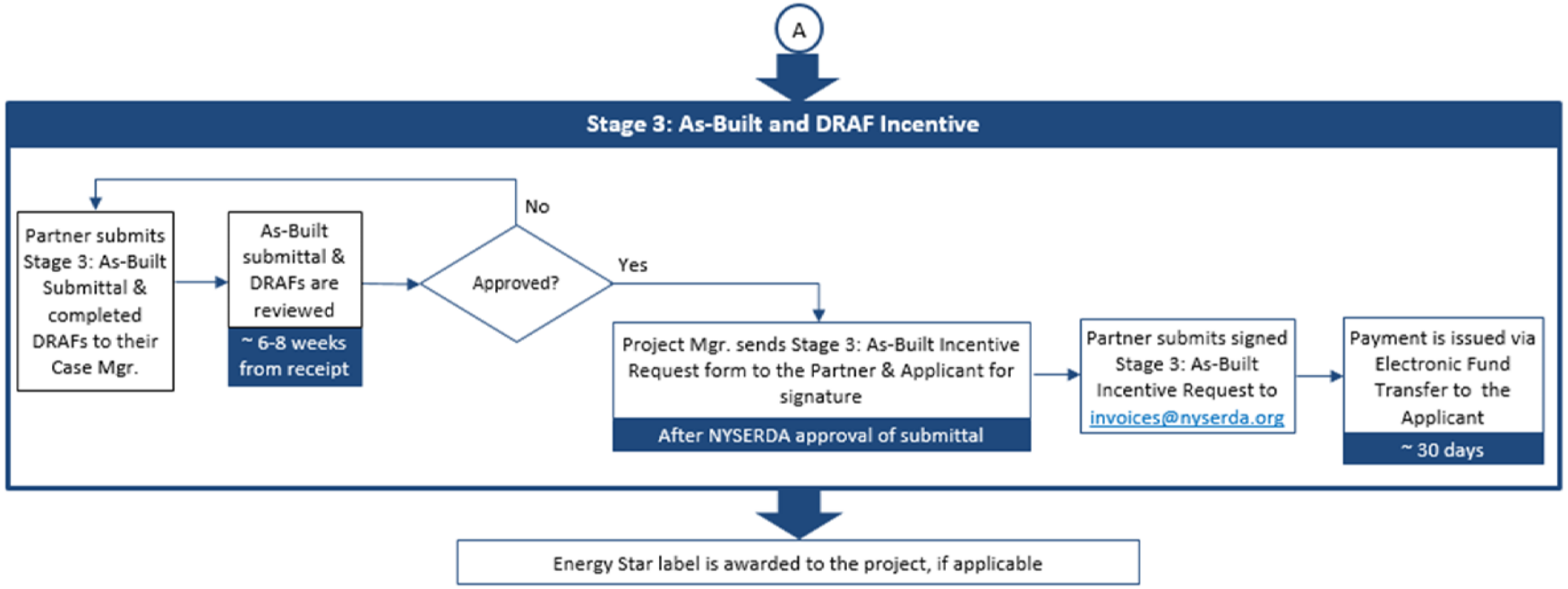
Buildings that are considered to be Historic Buildings according to the 19 NYCRR Part 1240.2, need not comply with the Envelope Section or the compartmentalization requirements listed in the table provided in the *Modified Prescriptive Path Requirements*.

APPENDIX A: MF NCP PROCESS FLOW CHARTS



Multifamily New Construction Program Process

Performance Path



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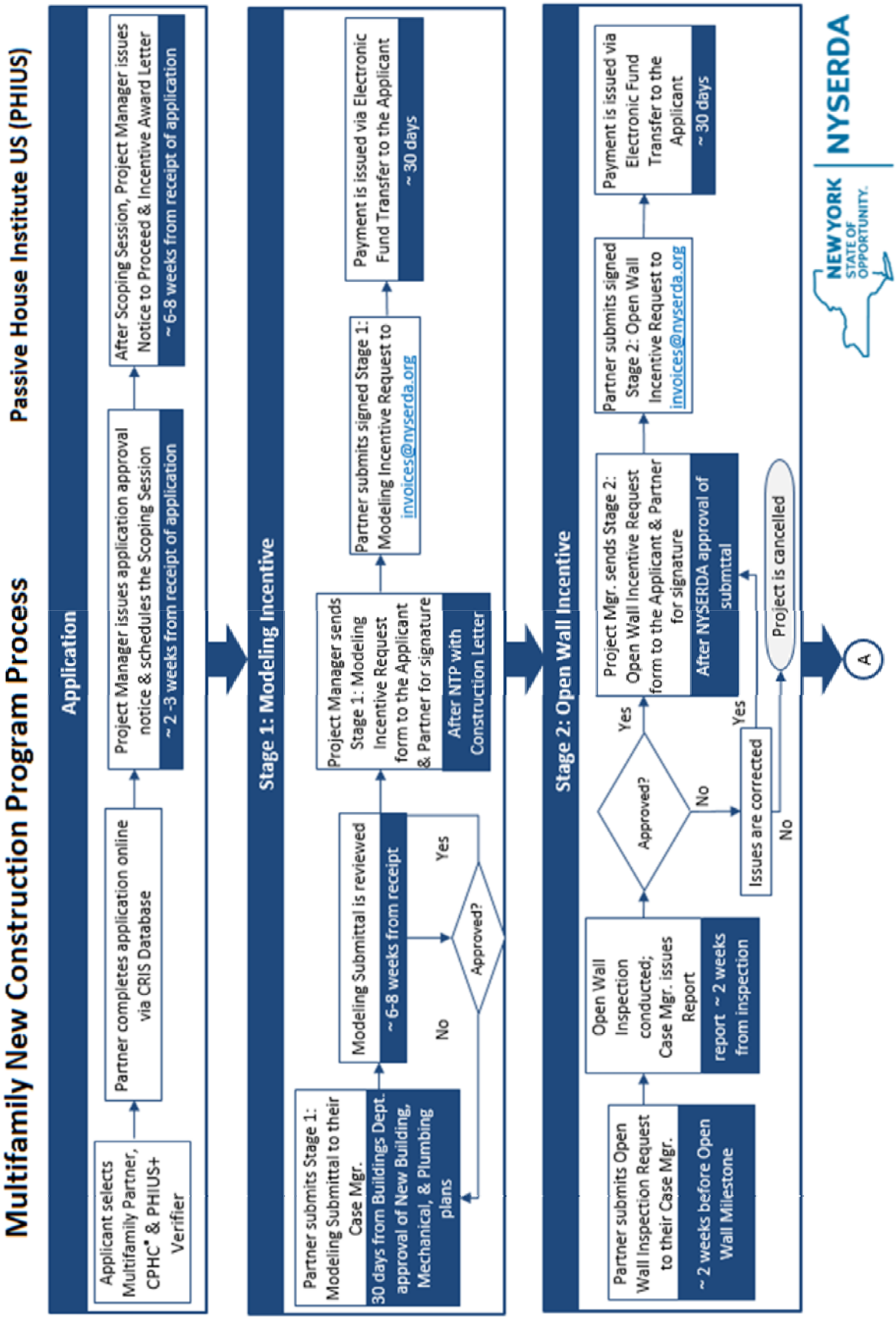
Multifamily New Construction Program Process
Passive House Institute US (PHIUS)
Application
Applicant selects Multifamily Partner, CPHC* & PHIUS+ Verifier
Partner completes application online via CRIS Database
Project Manager issues application approval notice & schedules the Scoping Session
~ 2 -3 weeks from receipt of application
After Scoping Session, Project Manager issues Notice to Proceed & Incentive Award Letter
~ 6-8 weeks from receipt of application
Stage 1: Modeling Incentive
Partner submits Stage 1: Modeling Submittal to their Case Mgr.
30 days from Buildings Dept. approval of New Building, Mechanical, & Plumbing plans
Modeling Submittal is reviewed
~ 6-8 weeks from receipt
Approved?
No
Yes
Project Manager sends Stage 1: Modeling Incentive Request form to the Applicant & Partner for signature
After NTP with Construction Letter
Partner submits signed Stage 1: Modeling Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
Stage 2: Open Wall Incentive
Partner submits Open Wall Inspection Request to their Case Mgr.
~ 2 weeks before Open Wall Milestone
Open Wall Inspection conducted; Case Mgr. issues Report
report ~ 2 weeks from inspection
Approved?
Yes
No
Project Mgr. sends Stage 2: Open Wall Incentive Request form to the Applicant & Partner for signature
After NYSERDA approval of submittal
Issues are corrected
Yes
No
Project is cancelled
Partner submits signed Stage 2: Open Wall Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
A
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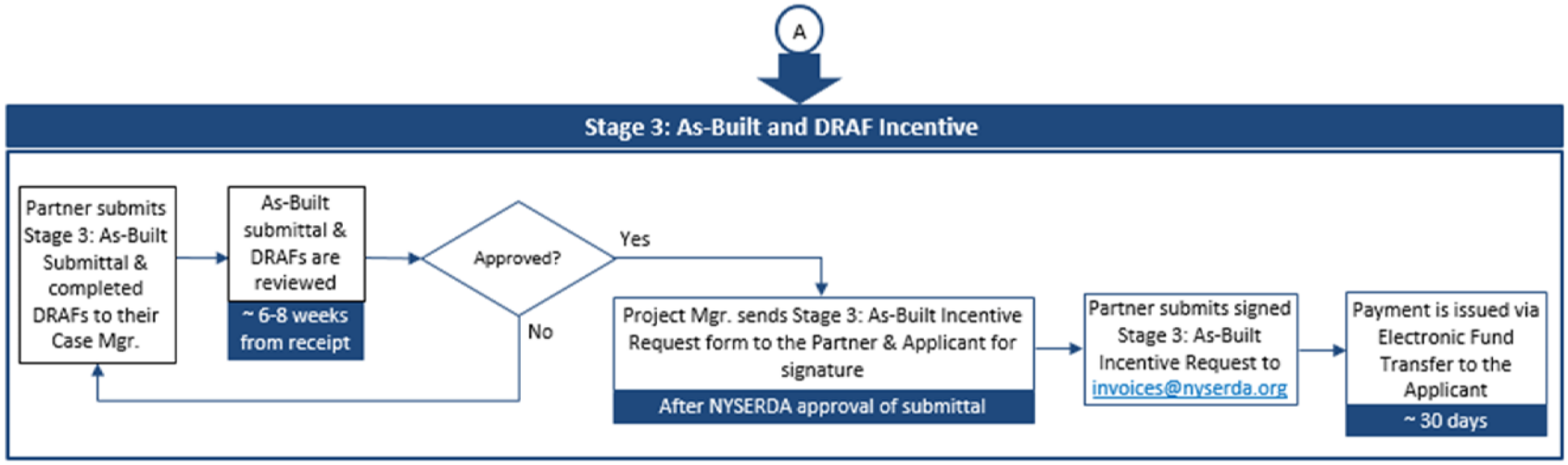
NYSERDA

Multifamily New Construction Program Process

Passive House Institute US (PHIUS)



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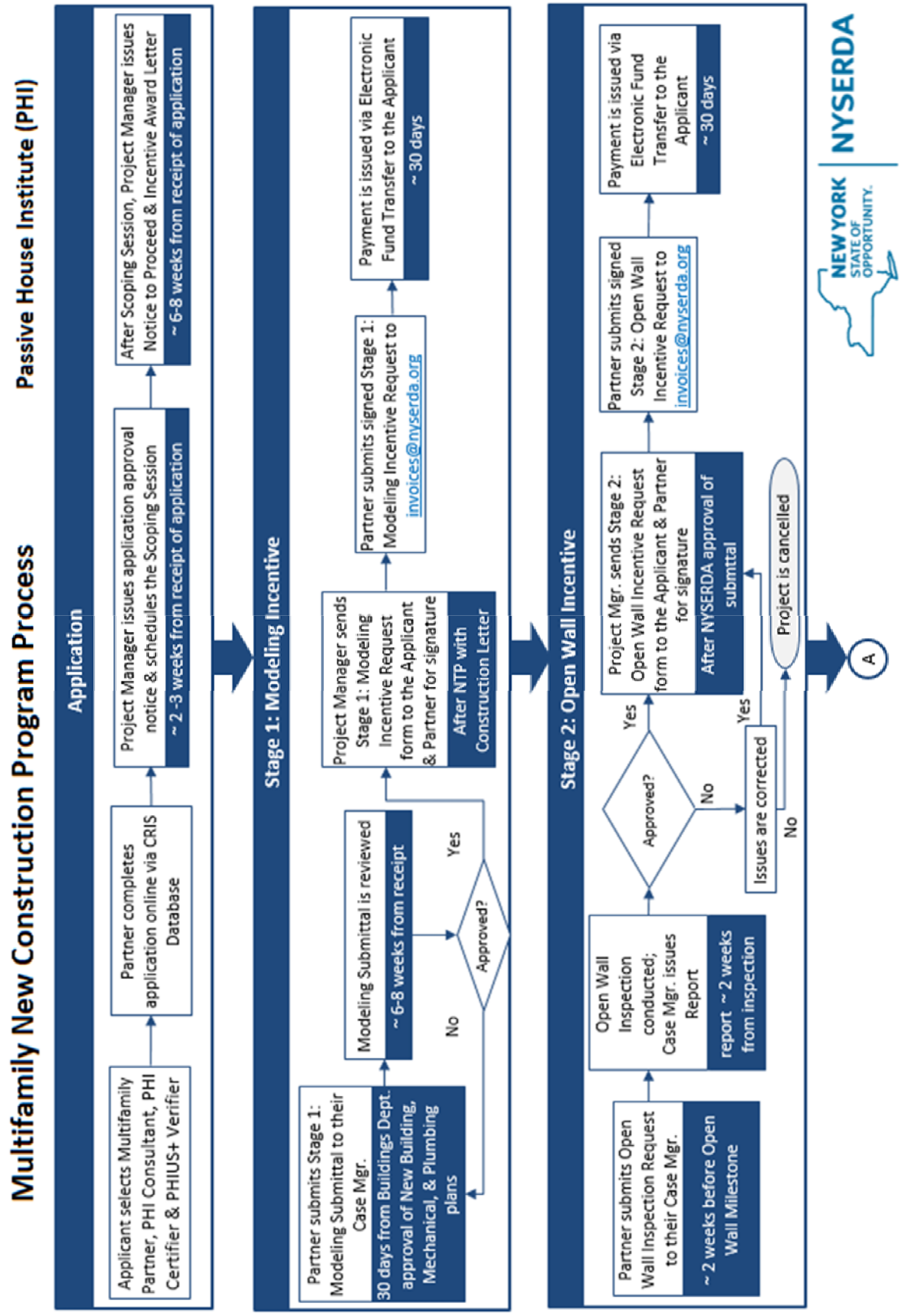
Multifamily New Construction Program Process
Passive House Institute (PHI)
Application
Applicant selects Multifamily Partner, PHI Consultant, PHI Certifier & PHIUS+ Verifier
Partner completes application online via CRIS Database
Project Manager issues application approval notice & schedules the Scoping Session
~ 2 -3 weeks from receipt of application
After Scoping Session, Project Manager issues Notice to Proceed & Incentive Award Letter
~ 6-8 weeks from receipt of application
Stage 1: Modeling Incentive
Partner submits Stage 1: Modeling Submittal to their Case Mgr.
30 days from Buildings Dept. approval of New Building, Mechanical, & Plumbing plans
Modeling Submittal is reviewed
~ 6-8 weeks from receipt
Approved?
No
Yes
Project Manager sends Stage 1: Modeling Incentive Request form to the Applicant & Partner for signature
After NTP with Construction Letter
Partner submits signed Stage 1: Modeling Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
Stage 2: Open Wall Incentive
Partner submits Open Wall Inspection Request to their Case Mgr.
~ 2 weeks before Open Wall Milestone
Open Wall Inspection conducted; Case Mgr. issues Report
report ~ 2 weeks from inspection
Approved?
No
Yes
Issues are corrected
No
Yes
Project is cancelled
Project Mgr. sends Stage 2: Open Wall Incentive Request form to the Applicant & Partner for signature
After NYSERDA approval of submittal
Partner submits signed Stage 2: Open Wall Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
A
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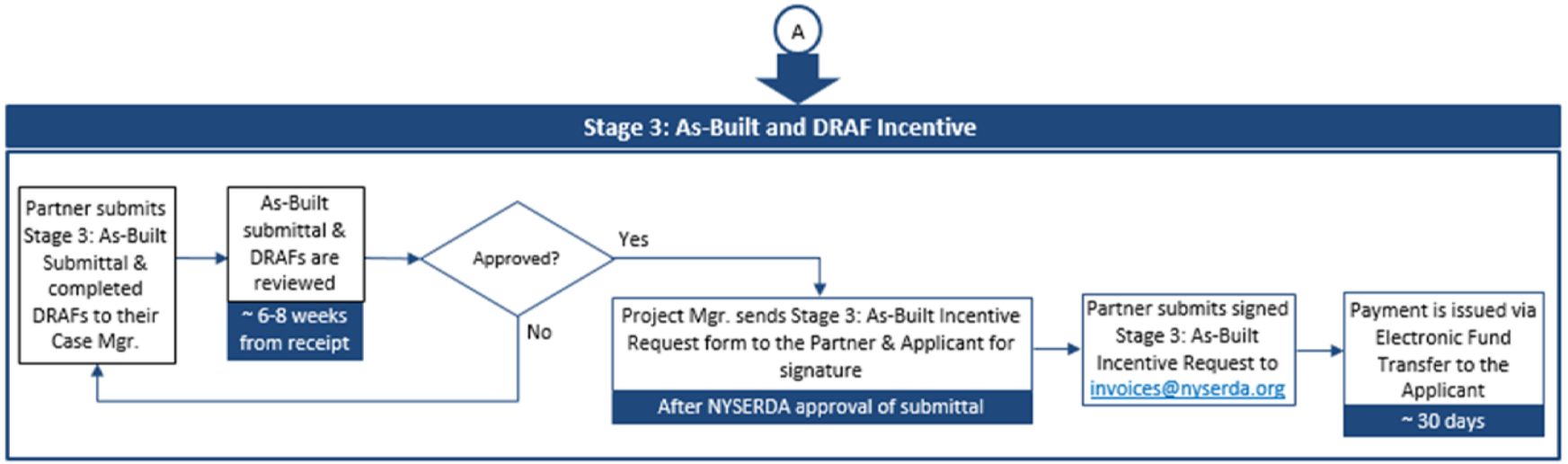
Multifamily New Construction Program Process

Passive House Institute (PHI)



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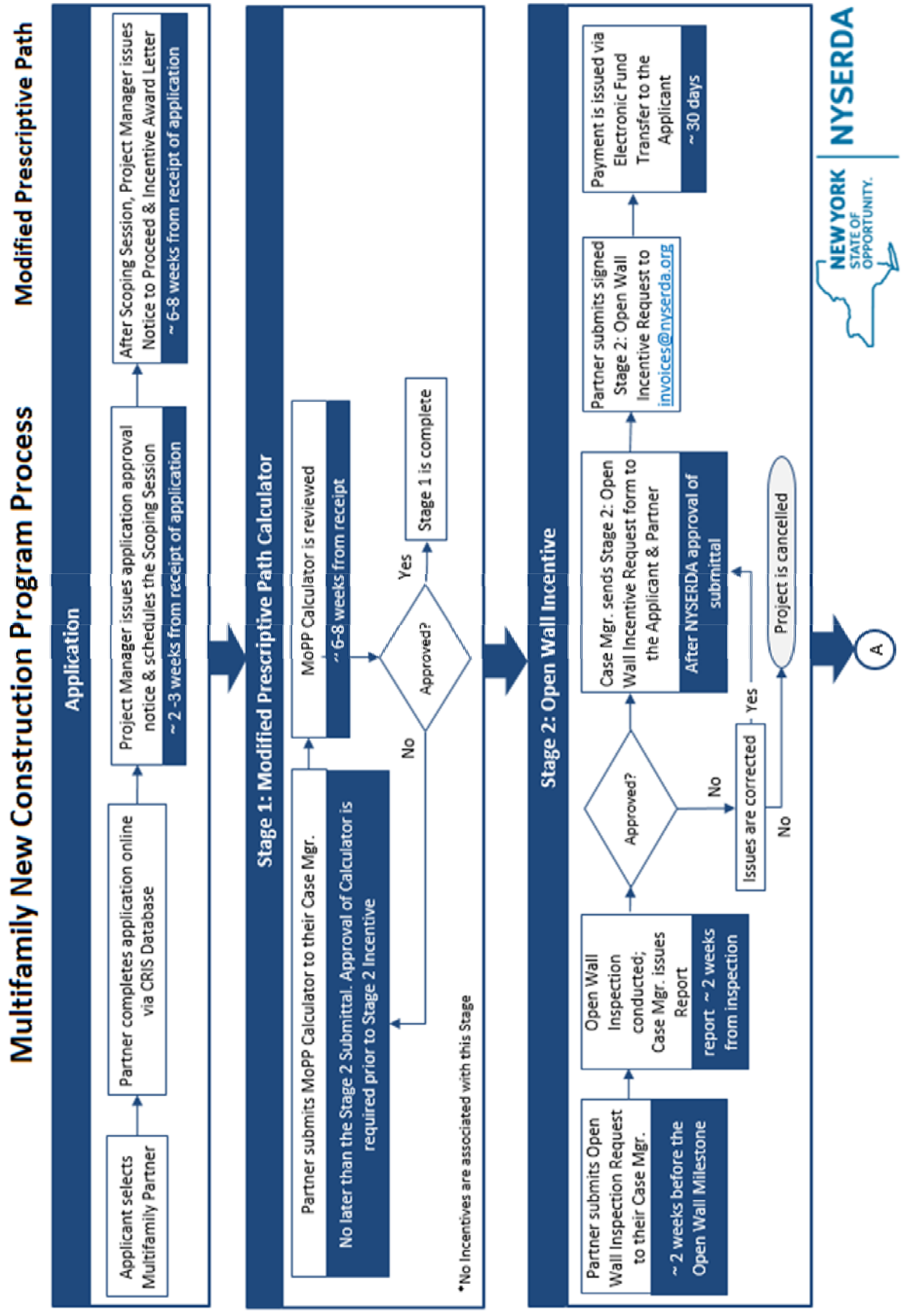
Multifamily New Construction Program Process
Modified Prescriptive Path
Application
Applicant selects Multifamily Partner
Partner completes application online via CRIS Database
Project Manager issues application approval notice & schedules the Scoping Session
~ 2 -3 weeks from receipt of application
After Scoping Session, Project Manager issues Notice to Proceed & Incentive Award Letter
~ 6-8 weeks from receipt of application
Stage 1: Modified Prescriptive Path Calculator
Partner submits MoPP Calculator to their Case Mgr.
No later than the Stage 2 Submittal. Approval of Calculator is required prior to Stage 2 Incentive
MoPP Calculator is reviewed
~ 6-8 weeks from receipt
Approved?
Yes
No
Stage 1 is complete
*No Incentives are associated with this Stage
Stage 2: Open Wall Incentive
Partner submits Open Wall Inspection Request to their Case Mgr.
~ 2 weeks before the Open Wall Milestone
Open Wall Inspection conducted; Case Mgr. issues Report
report ~ 2 weeks from inspection
Approved?
No
Issues are corrected
Yes
No
Project is cancelled
Case Mgr. sends Stage 2: Open Wall Incentive Request form to the Applicant & Partner
After NYSERDA approval of submittal
Partner submits signed Stage 2: Open Wall Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
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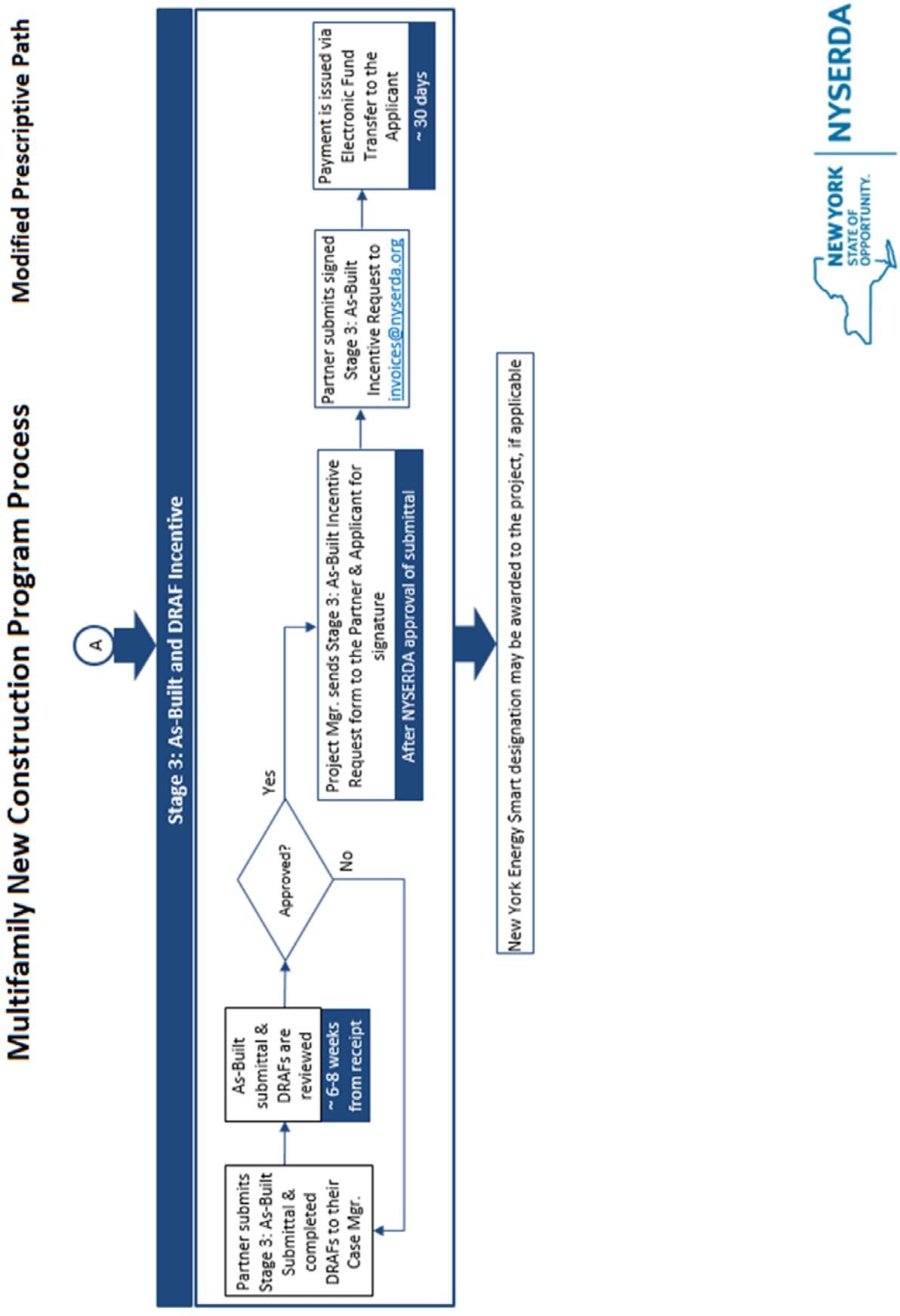
Multifamily New Construction Program Process
Modified Prescriptive Path
A
Stage 3: As-Built and DRAF Incentive
Partner submits Stage 3: As-Built Submittal & completed DRAFs to their Case Mgr.
As-Built submittal & DRAFs are reviewed
~ 6-8 weeks from receipt
Approved?
No
Yes
Project Mgr. sends Stage 3: As-Built Incentive Request form to the Partner & Applicant for signature
After NYSERDA approval of submittal
Partner submits signed Stage 3: As-Built Incentive Request to invoices@nyserda.org
Payment is issued via Electronic Fund Transfer to the Applicant
~ 30 days
New York Energy Smart designation may be awarded to the project, if applicable
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