

The Green New (MIP) Deal

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Panelists:

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Moderators:

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Agenda

Introductions

223(a)(7)

223(f)

221(d)(4) Green Standards Comparison

Q&A

Green MIP Requirements



Completed within 3 years prior to date of application



ENERGY STAR for Existing Buildings Certification



SEP / SEDI based on modeling / sampling



CNA – components + replacements are ENERGY STAR or comparable



Data Collection Plan



HUD-91070M Certification & HUD-92466 R5

223(a)(7)

Green MIP Requirements

SECTION 6.5

YES

Green MIP
Please?



Green MIP



1. Existing
Green MIP


- **75+** Prior Years



Certificate



2. Prior Green
Certification

-  Prior Recognized Certification
(per 6.3.1 & 6.3.2)

NO



None



WITHOUT Prior Green
MIP or Certification

223(a)(7)

Update Benchmark Score

- Secure 12-months of 100% of energy data with average monthly occupancy of 80%+
- End date of the 12-month data period must be within 6 months of loan application

Secure New ENERGY STAR Existing Building Certification



If 100% of 12-months of energy data is not available due to utility

- *Secure a sampled SEP benchmark with a score above 75*
- *Non-critical repairs must include the installation of energy monitoring system*
- *ENERGY STAR Existing Building Certification must be earned within 15 months of the completion of the non-critical repairs*

Submit Firm Application

- Application must include an ENERGY STAR Existing Building Certification
- Provide a HUD Custom SEP excel report with the CNA



**HUD-91070M Cert;
HUD-92466 Rider 5
(6.4.3 & 4)**



**100% Data
Collection plan
(6.4.5)**

Q & A



223(a)(7)

Green MIP Requirements SECTION 6.5



Certificate



NGBS Certificate

**Existing
Green MIP**

**Newly Built w/
221(d)(4):**

- **No 12-month
data w/ 80+
min. occupancy**

✓
YES



Green MIP

**1. Existing
Green
MIP**



New ESEB Certification w/ Firm App

WAIVED



**75+
SEDI**

12 consecutive months of min. occupancy?: **NO**

- SEDI based on as-built plans/specs, signed by Energy Prof.
- Actual Energy Star Certification submitted within 15 months



223(a)(7)

Green MIP Requirements

SECTION 6.5.2 & 6.5.3

- Submitted with the Firm Application, signed & sealed.
 - Single Exception: If Owner is unable to collect 12-month, 100% data:
 - ✓ Submit SEP based sampling data (25% units) + Energy Audit;
 - ✓ **Install sub-metering devices (non-critical repair);**
 - ✓ Actual ESEB Certification submitted < 15 months after repairs done.
 - ✓ Data recording period (12-month) ending < 6 months from the submission date.
 - ✓ Physical occupancy > 80%



(6.5.3.A)

223(f)

Green MIP Requirements

SECTION 6.6

- 2 Kinds of Properties

Green MIP
Please?



...or



Certificate

1



**1. Properties WITH Prior
Green Certification**



None

2



**2. Properties WITHOUT
Prior Green Certification**



Green MIP Requirements

1 Properties WITH Prior Green Certification Achieved (MAP 6.6.1)

1. Achieved Green Certification must be one of the recognized standards listed in 6.3.1.B;
2. MAP 6.5.2



Certificate



Energy Star for Existing Buildings Certification (Score: 75+)

Submitted with the [Firm Application](#)

...or



75+

SEP

- ✓ Allowed only if 100% Data is not possible;
- ✓ SEP Score of 75+ based on modeling + sampled data;
- ✓ Must install submetering devices to collect 100% data.

3. MAP 6.4.1 to 6.4.5, including:



Energy Star Appliances:
Future replacements (6.4.2)



HUD-91070M Cert;
HUD-92466 Rider 5
(6.4.3 & 4)



100% Data
Collection plan
(6.4.5)

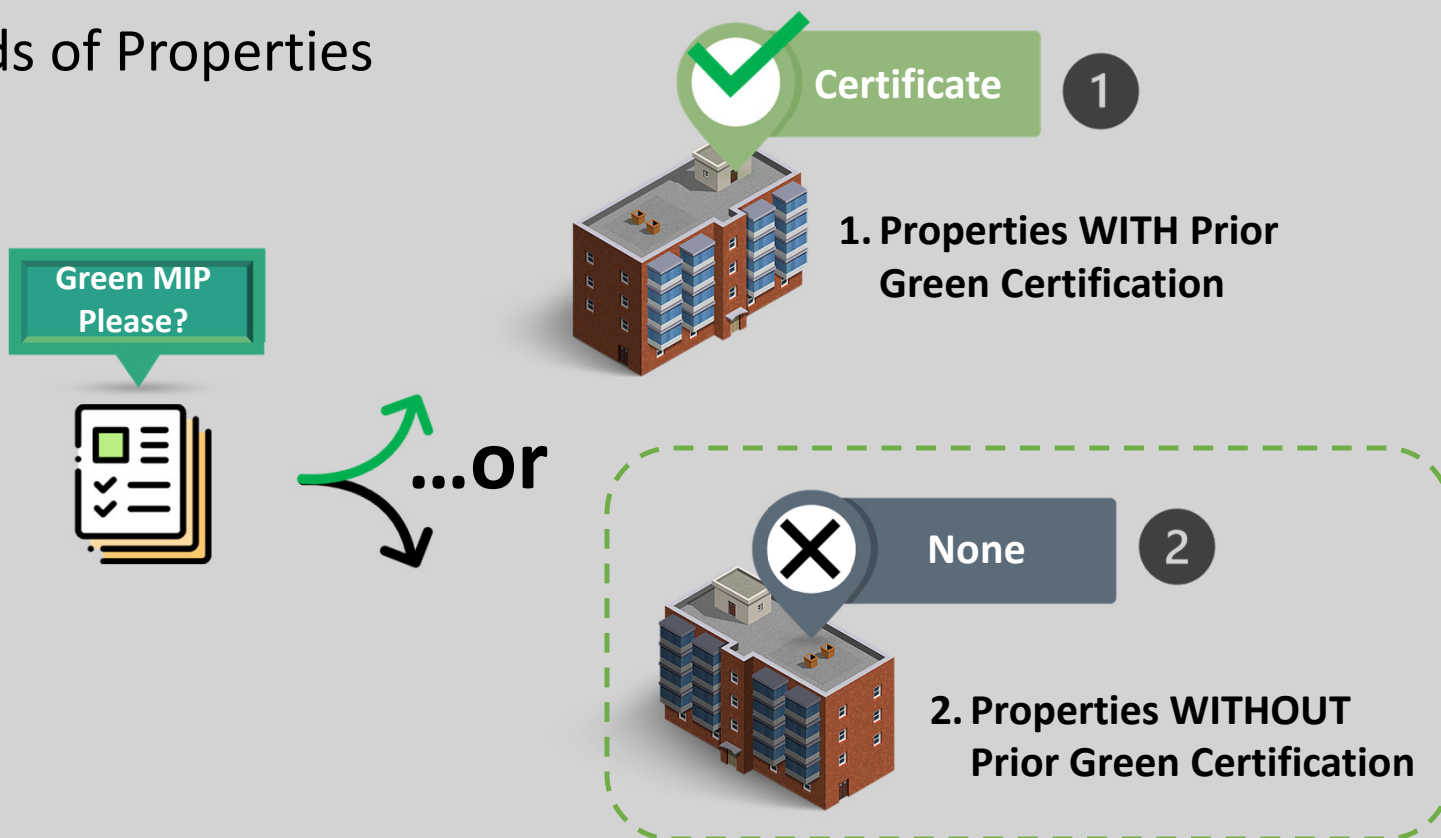


223(f)

Green MIP Requirements

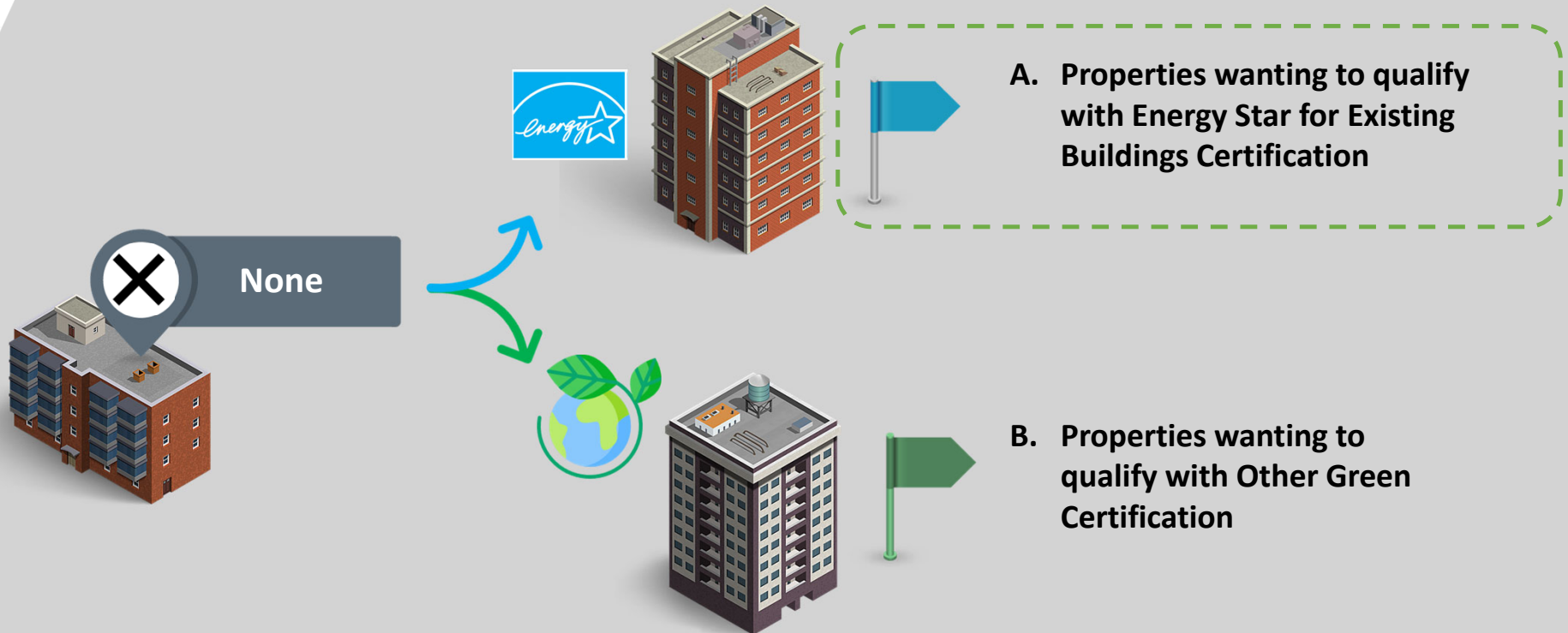
SECTION 6.6

- 2 Kinds of Properties



Green MIP Requirements

2 Properties WITHOUT Prior Green Certification Achieved (MAP 6.6.3)



Green MIP Requirements

A. Properties Qualifying with Energy Star for Existing Buildings (MAP 6.6.2)

1. Only allowed for applications filed **within 2 years** of MAP 2020 Publication Date (Deadline 12/18/2022);

2. Certificate of Occupancy:



Issued within 3 years
prior to date of application

3. MAP 6.6.2



12 consecutive months of min. occupancy?: YES

- Energy Star Existing Buildings w/ Score: 90+
- Submitted with the Firm Application

...or



90+
SEDI

12 consecutive months of min. occupancy?: NO

- SEDI Score: 90+ NOT contingent on proposed repairs/upgrade
- Actual Energy Star Certification submitted within 15 months

4. MAP 6.4 (General Requirements), including:



Energy Star Appliances:
Future replacements (6.4.2)



HUD-91070M Cert;
HUD-92466 Rider 5
(6.4.3 & 4)



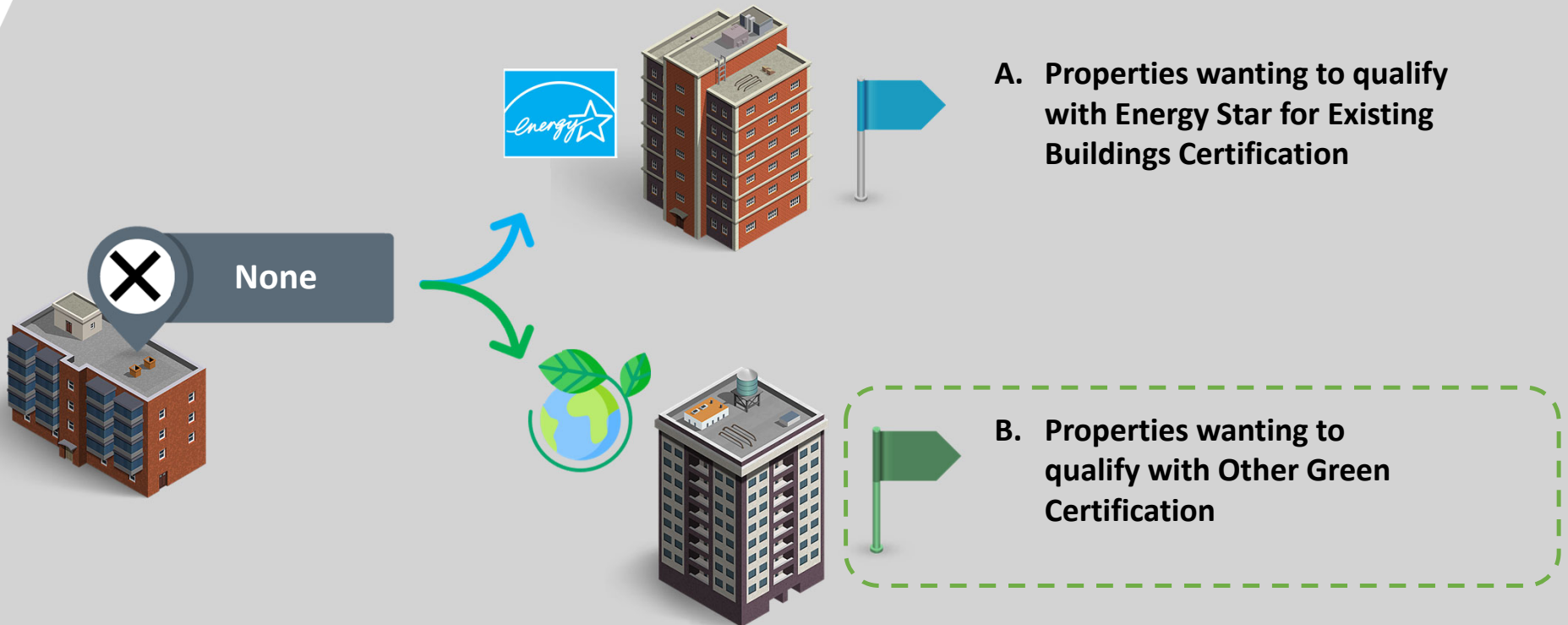
100% Data
Collection plan
(6.4.5)





Green MIP Requirements

2 Properties WITHOUT Prior Green Certification Achieved



223(f) Existing Property with no prior HUD recognized green building certifications

Set expectations. This route will take some investment.

Assess current performance and plan for green certification

- SEP Energy Benchmark
 - If 100% data is unavailable, 25%+ sampling is permitted and extrapolation method must be explained
- ASHRAE Energy Audit to assess improvement scope
 - ASHRAE Level 2 Energy Audit acceptable where general contractor (GC) is retained to estimate costs
 - ASHRAE Level 3 Energy Audit is required if no GC is retained
- SEDI report demonstrating that a score above 75 will be obtained with the recommended EEMs
- (6.6.3.6) Engage Project Architect or Professional Engineer to meet requirements of 6.7.2

Prepare Firm application

- CNA should include energy usage for each recommended energy efficiency measure (EEM)
- Register Project with Green Building Program



**Energy Star Appliances:
Future replacements
(6.4.2)**



**HUD-91070M Cert;
HUD-92466 Rider 5
(6.4.3 & 4)**



**100% Data
Collection plan
(6.4.5)**

Complete Renovation and Earn Green Building Certification

- Work with Green Verifier during the construction to ensure green program requirements are met
- Earn Green Building Certification at completion of project



Home Innovation
NGBS GREEN REGISTERED™



Source: Section 6.6.3

Q & A



223(f)

Green MIP Requirements

SECTION 6.6



Green MIP



ESEB

**Existing
Green MIP**

**Previously rec'd
Green MIP w/**

**ENERGY STAR for
Existing Buildings
Certification**

✓
YES

Green MIP



=



Certificate

1

**1. Properties WITH
Prior Green
Certification**

✓ Follow
**6.6.1.A
requirements**

?

221 (d)(4)

Energy Efficient Performance

- Statement of Energy Design Intent (SEDI) with a score comfortably over 75
- CNA should include the custom-SEDI excel file with the eTool

Path to Secure a Green Building Certification

- Plan to secure a Green Building Certification (Project registered, scoresheet completed)
- Building Components:
 - Must specify ENERGY STAR appliances, HVAC or high-performance option if ENERGY STAR option isn't available
 - Must specify WaterSense labeled products



Data Acquisition Plan

- 100% aggregated data from utility or install remote meters/data-loggers
- Prepared by a Qualified Energy Professional



**100% Data
Collection plan
(6.4.5)**



**HUD-91070M Cert;
HUD-92466 Rider 5
(6.4.3 & 4)**

Q & A



221(d)(4)

Green MIP Requirements SECTION 6.6

More than one Green
Certification for the
same property?

Certificate

B

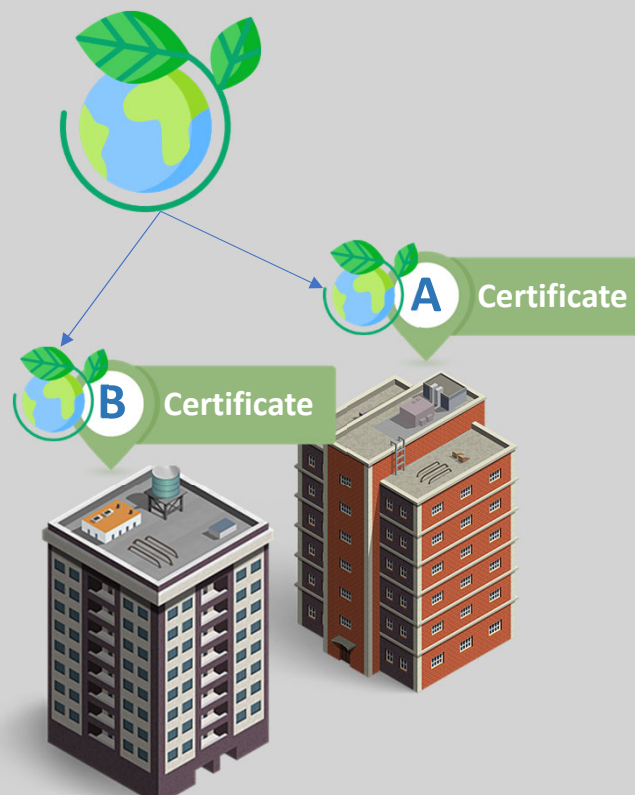
A

Certificate



?

✓
YES



Green MIP - Summary of the key changes

- Key Points for Owners and Developers
 - Except for the transition period that runs through Dec-2022, ENERGY STAR Existing Building Certification will no longer be the Green Certification that allows access to the Green MIP
 - Developers planning for a 223(f) after construction, should plan to secure a green building certification during construction
 - Owners considering a renovation should work with a Green Verifier to secure the certification during the renovation
- New specific guidance for energy analysis:
 - SEP & Data Plan must be performed by Qualified Energy Professional
 - Essentially no sampling for SEPs: 100% aggregated data from utility or install remote meters/data-loggers
 - Submitted SEP should be based on data within 6 months of application
 - Qualifications for Energy Modeling are based on the type of buildings (3-story vs. 4+ stories)
 - Clear definition that if ENERGY STAR algorithm is changed, past loans will be held to the energy use intensity (EUI) at time of application



SOUTHFACE'S EXPERTISE

- Nonprofit organization with over 40 years of experience in promoting better built environments and partnering with local leaders for more resilient communities
- Advancing the regenerative economy through building science, municipal planning and training and certification programs to support people and business
- Improving economic prosperity, ecological and human health and well-being through solutions-focused strategies



WHAT WE DO

- EarthCraft Building Certification
- BIT Building training program to drive high-performance operations and maintenance strategies
- Fitwel healthy building certification
- Indoor Air Quality monitoring
- Green Building Technical Services



EARTHCRAFT MULTIFAMILY (ECMF)

- Regional green building program for Southern and Eastern USA
 - Administered by Southface through exclusive license
- Updated approximately every 4-5 years
- Program focus
 - Site Planning
 - Construction Waste Management
 - Resource Efficiency
 - Durability and Moisture Management
 - Indoor Air Quality
 - High Performance Building Envelope
 - Energy Efficient Systems
 - Water Efficiency
 - Education and Operations



EARTHCRAFT MULTIFAMILY (ECMF)



- Certified, Gold, Platinum levels, based on points
- 2015 IECC
- Performance or Prescriptive Paths
- Envelope and duct testing required
- ASHRAE 62.2-2010 ventilation required

RESOURCE EFFICIENCY (RE)				
RE 1: RESOURCE EFFICIENT DESIGN				
REQUIRED AT ALL LEVELS				
RE 1.0	Limit framing at all windows and doors	-	-	
RE 1.1	Engineered roof framing (90%)	-	-	
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED				
RE 1.2	Advanced Framing:	Select all that apply:		
	1. 2-stud corners where structurally feasible	3		
	2. Ladder T-walls where structurally feasible	2		
	3. Size headers for loads (non-structural headers in non-load bearing walls)	1		
OPTIONAL AT ALL LEVELS				
RE 1.3	Average floor area of unit:	Select one:		
	A. < 800 square feet	2		
	B. 800-1100 square feet	1		
RE 1.4	Floor joists are 24" on center (≥80%)	1		
RE 1.5	Non-load bearing wall studs are 24" on center	1		
RE 2: ADVANCED FRAMING PRODUCTS				
OPTIONAL AT ALL LEVELS				
RE 2.0	Precast insulated foundation walls (≥90%)	2		
RE 2.1	Insulated concrete forms or precast autoclaved aerated concrete (≥90%):	Select all that apply:		
	1. Foundation walls	2		
	2. Exterior walls	3		

NATIONAL GREEN BUILDING STANDARD (NGBS)

- ANSI-approved program recognized nationally
- Administered by Home Innovation Research Labs
- Updated every 3 years
- Focuses on 5 Chapters
 - 5) Lot Design, Preparation and Development
 - 6) Resource Efficiency
 - 7) Energy Efficiency
 - 8) Water Efficiency
 - 9) Indoor Environmental Quality
 - 10) Operation, Maintenance, and Building Owner Education



NATIONAL GREEN BUILDING STANDARD (NGBS)

- Bronze, Silver, Gold and Emerald levels, based on points
- 2018 IECC
- Performance or Prescriptive Paths (Energy and Water)
- Envelope testing required, unless classified as commercial and complies with IECC C402.5 Certified
- Duct testing required for Prescriptive Path and generally for 3 stories and below
- ASHRAE 62.2-2010 ventilation required if envelope testing results are <5 ACH50



ENERGY STAR MULTIFAMILY NEW CONSTRUCTION

- Recognized nationally
- Partnership between EPA and DOE
- Newer program incorporating low, mid and high-rise MF
- Main focus is on Energy, but also encompasses IAQ, Water Efficiency and Water Management
 - Thermal Enclosure (insulation, fenestration, air sealing)
 - HVAC System (installation/commissioning, efficiency, sizing, ventilation, duct tightness, etc.)
 - Other: Hot Water, Lighting, Appliances, WaterSense fixtures, Water Management and Energy consumption data collection (50k sq.ft. and up)



ENERGY STAR MULTIFAMILY NEW CONSTRUCTION

- Only ENERGY STAR Certified level
- Code varies depending on current state code, 2009 and 2012 for envelope
- Performance or Prescriptive Paths
- Envelope, duct and ventilation testing required
- ASHRAE 62.2-2010 or 2013 ventilation required, depending on pathway
- EPA-recognized credential required for HVAC design/install
- HVAC commissioning required by Functional Testing Agent (FTA)
- Whole building energy consumption data collection required



PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Registration or Certification Fees	Example: 100 unit, Four 3-story bldgs: \$7,500 -Max is \$9,000 at >106 units	Example: 100 unit, Four 3-story bldgs: \$4,200 -No max, per unit & bldg. price -Volume pricing	None
Builder/ Developer Requirements	Builder superintendent training, \$75, 4 hr	Signed Agreement, Proof of insurance	Partnership agreement signed and online orientation
Locations Recognized	Southeastern US, more broadly states with CZs 1-4	National	National

PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Code Version Followed	2015 IECC	2018 I-Codes	Varies based on current state code
Type of Building	<ul style="list-style-type: none">-Low, Mid and High-Rise-Duplex, Row Home, Townhome-Mixed Use and Adaptive Reuse	<ul style="list-style-type: none">-Low, Mid and High-Rise-Mixed Use-Group R and Group I-1: ALFs, hotels/motels, dorms, etc.	<ul style="list-style-type: none">-Any MF building that is not a two-family dwelling-Mixed use with residential space >50%-Townhomes in groups of 3+

PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Insulation Installation Grade Required	Grade 2	Grade 1	Grade 1
Credentialed HVAC Installation Requirement	Points awarded, not required	Points awarded, not required	HVAC design/install requires EPA-recognized credentialed contractor
HVAC Commissioning	Points awarded, not required	Points awarded, not required	Required

PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Ventilation Requirement	ASHRAE 62.2-2010 ventilation required	ASHRAE 62.2-2010 ventilation required if envelope testing results are <5 ACH50	ASHRAE 62.2-2010 or 2013 required, depending on pathway
Bath/Kitchen Ventilation	Bath: Yes, 20/50 CFM to outside Kitchen: If gas range/cooktop, yes. 100 CFM to outside	Bath: Yes, 20/50 CFM to outside Kitchen: Points, not required	Bath: Yes, 20/50 CFM to outside Kitchen: Yes, 100 CFM and/or 5 ACH to outside
Ventilation Testing	Points awarded, not required	Points awarded, not required	Required; dwelling units and common spaces

PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Envelope Testing (Blower Door)	Required - 7 ACH50 or 0.35 ELR	Required, unless classified as commercial and complies with IECC C402.5 - CZ 1-2: 5 ACH50; 0.33 ELR - CZ 3-8: 3 ACh50; 0.28 ELR	Required - 0.30 ELR
Duct Tightness Testing	Required	Required for Prescriptive Path and generally for 3 stories and below	Required

PROGRAM COMPARISON

	ECMF 2020	NGBS 2020	ESTAR MF
Radon	Not required, points awarded for radon system and testing	Passive radon system and testing required in Zone 1	Not required, but recommended for Zones 1-3
Water Management & Durability	Required, verified by Technical Advisor	Required, verified by Green Verifier	Required, verified by Builder/Developer
Owner/Property Mgmt. Training	Project-specific manual required	-Manuals required for owner and tenants -Owner training required	Not required



Questions?

Moderators:

Angela Folkers, Associate Director, Berkadia

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Thank-you to our Panelists:

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