Minimum Requirements for Green Globes Multifamily (NC)

To be certified through Green Globes Multifamily for New Construction (NC), projects must achieve all Minimum Requirements for Ventilation and Energy. In addition, projects must also achieve a minimum 35% total score out of all applicable points in the Green Globes Multifamily program. Minimum Requirements must be met to be eligible for the program but are separate from the criteria used in the assessment.

Meet all Ventilation Minimum Requirements and Energy Minimum Requirements.

VENTILATION MINIMUM REQUIREMENTS

Building design must establish and meet minimum indoor air quality performance by meeting all three Ventilation Minimum Requirements listed below.

1. Ventilation Air Quantity

The quantity of ventilation for the building is compliant with one of the following:

- **Option 1:** ANSI/ASHRAE Standard 62.1-2013 Ventilation for Acceptable Indoor Air Quality;

ANSI/ASHRAE 62.1-2013 (read only): https://ashrae.iwrapper.com/ViewOnline/Standard_62.1-2013

- **Option 2 (Lowrise and Midrise Multifamily Only):** ANSI/ASHRAE Standard 62.2-2013 Ventilation for Acceptable Indoor Air Quality in Low-Rise Residential Buildings.

ANSI/ASHRAE 62.2-2013 (read only): https://ashrae.iwrapper.com/ViewOnline/Standard_62.2-2013

- **Option 3:** ICC International Mechanical Code (ICC IMC 2015), Chapter 4;

ICC International Mechanical Code 2015, Chapter 4: https://codes.iccsafe.org/content/IMC2015/chapter-4-ventilation

- **Option 4:** IAPMO UMC (2015) Uniform Mechanical Code;

2015 Uniform Mechanical Code: http://epubs.iapmo.org/UMC/mobile/index.html#p=1

- **Option 5:** Local codes or standards (if more stringent).

2. Air Handling Equipment

Equip air handling equipment with filtration as follows:

- Air handling equipment that provide ventilation air to terminal devices (e.g. central air handler, DOAS, etc.): minimum MERV 13; and
- Single zone terminal devices (e.g. fan-coil): minimum MERV 8.

*Not applicable where **non-ducted** circulating unitary equipment serves only a single zone (e.g. unit heaters, force-flows, mini-split heat pumps).*

3. Operations & Maintenance Plan

Specify regular ventilation maintenance and indoor air quality (IAQ) in an Operations & Maintenance (O&M) Plan. Ensure that specific issues (e.g. dirty air filters, dirty air return grills, maintenance of mechanical units, etc.) are identified and a regular maintenance plan is developed for maintaining IAQ goals.

ENERGY MINIMUM REQUIREMENTS

Building design must achieve greater than 15% projected energy consumption savings over respective established baseline and must meet all three (3) Energy Minimum Requirements.

1. Energy Efficient Design

Projects must achieve greater than 15% projected energy consumption savings through one of the following options.

Generate an energy model for the entire building, input energy use and building characteristics into ENERGY STAR Target Finder, and choose one of the following:

- **Option 1: ENERGY STAR® Score -** For multifamily properties with 20 or more units. Achieve an ENERGY STAR performance score of 75 or greater in the Target Finder program. See 3.3.1.1.1 for additional guidance.

OR

- **Option 2: EUI Reduction** - Demonstrate the proposed design targets a greater than 15% reduction of energy use intensity (EUI) compared to the national median source EUI.

2. Energy Efficient Equipment & Products

Where not already covered by Energy Efficient Design, install ENERGY STAR-labeled and/or FEMP-designated energy efficient products and appliances (including clothes washers, dishwashers, and refrigerators), if such products and/or appliances are being provided.

ENERGY STAR Qualified Product Lists: http://www.energystar.gov

Federal Energy Management Program (FEMP) Energy and Water Efficient Products: http://www1.eere.energy.gov/femp

3. Energy Performance Monitoring & Tracking

Confirm that the local utility or onsite master energy meter(s) provide, at a minimum, aggregated whole-project energy consumption data for each energy utility type. Where local utility or current meters do not provide such data install energy meters that do.

Commit to entering energy consumption data into ENERGY STAR Portfolio Manager to track ongoing performance and sharing of that data with Green Building Initiative. Document for future performance verification.

Required Documentation – upload to Green Globes "v3" Software:

- ☐ Completed Minimum Requirement Survey
- ☐ Construction documents w/ventilation code info
- ☐ ENERGY STAR Portfolio Manager Statement of Energy Design Intent (SEDI), or screenshot of ENERGY STAR Score
- ☐ Energy model outputs

Exception Policy

GBI reserves the right to issue energy or ventilation exceptions on a case-by-case basis as needed for unique circumstances, e.g., function of the building requires a limited amount of high flow fixtures. Green Globes Multifamily NC projects must still meet greater than 15% energy consumption savings requirement.

Minimum Requirements for Green Globes Multifamily (EB)

To be certified through Green Globes Multifamily for Existing Buildings, projects must achieve all Energy Minimum Requirements. In addition, projects must also achieve a minimum 35% total score out of all applicable points in the Green Globes Multifamily program. Minimum Requirements are required to be eligible for the program but are separate from the criteria used in the assessment.

ENERGY MINIMUM REQUIREMENTS

Demonstrate greater than 15% energy consumption savings over respective established baseline and meet all three (3) Energy Minimum Requirements.

1. Energy Performance

Choose either the ENERGY STAR® Portfolio Manager Path or the Energy Consumption Savings Path.

1.A ENERGY STAR® Portfolio Manager Path

Projects following the ENERGY STAR® Portfolio Manager Path must choose one of the following two options:

- **Option 1: ENERGY STAR® Score -** For multifamily properties with 20 or more units. Achieve an ENERGY STAR energy performance score of 75 or greater using the Portfolio Manager program.

OR

- **Option 2: EUI Reduction -** Demonstrate greater than 15% reduction of energy use intensity (EUI) compared to the national median source EUI.

1.B Energy Consumption Savings Path

For multifamily properties with less than 20 units and no energy model, demonstrate greater than 15% energy consumption savings over respective established baseline. Compare whole building energy data from previous 12 months against 3 contiguous years of energy consumption use within the previous 9 years (normalized for climate and occupancy). All data must be input into ENERGY STAR Portfolio Manager.

2. Energy Efficient Equipment & Products

Confirm Operations & Maintenance (O&M) policy to install ENERGY STAR-labeled and/or FEMP-designated energy efficient products and appliances (including clothes washers, dishwashers, and refrigerators), when such products and/or appliances are being replaced. Put into place an O&M policy for energy efficient equipment and products if there is no policy.

ENERGY STAR Qualified Product Lists: http://www.energystar.gov

Federal Energy Management Program (FEMP) Energy and Water Efficient Products: http://www1.eere.energy.gov/femp

3. Energy Performance Monitoring & Tracking

Confirm that the local utility or onsite master energy meter(s) provide, at a minimum, aggregated whole-project energy consumption data for each energy utility type. Where local utility or current meters do not provide such data, install energy meters that do.

Commit to entering energy consumption data into ENERGY STAR Portfolio Manager to track ongoing performance and sharing of that data with Green Building Initiative. Document for future performance verification.

Required Documentation – upload to Green Globes "v3" Software:

- ☐ Completed Minimum Requirement Survey
- ☐ ENERGY STAR Portfolio Manager Statement of Energy Design Intent (SEDI), or screenshot of ENERGY STAR Score
- ☐ Energy model outputs

*Note on Whole Building Consumption Data

An energy model may be developed if you don't have 12 months of energy data to use as your baseline, including scenarios where it is not possible to access all tenant utility data. The energy model must include the following systems:

1. *All mechanical systems;*
2. *Domestic hot water systems;*
3. *Lighting;*
4. *Renewable sources of energy, as applicable;*
5. *Pool equipment pumps and spas, as applicable.*

Exception Policy

GBI reserves the right to issue energy exceptions on a case-by-case basis as needed for unique circumstances, e.g., function of the building requires a limited amount of high flow fixtures. Multifamily projects must still meet the greater than 15% energy consumption savings requirement.