

Highlights of the Changes to the ENERGY STAR Multifamily New Construction Program Documents since March 2018

While most of the updates made to the program requirements have been clarifications, this document summarizes the most significant changes and clarifications. Please reference the redline version of the Checklists for more details on what has changed from the previous Checklists posted in March.

1. HVAC Design Report
 - a. Consistent with Homes, made the table in Section 5 for reporting room-by-room design airflows required, and created an Appendix of tables, to document extra spaces or systems as needed.
 - b. For improved visibility, added the remaining HVAC related items for Prescriptive Path projects to the Design Report.
 - c. For documenting inputs for dwelling unit load calcs, modified the ranges for window area and conditioned floor area, such that areas could be less than areas used by the Rater in the Rated Home.
 - d. For documenting inputs for dwelling unit load calcs, modified the text related to infiltration rate, such that “tight” options are required or no less than 0.24 air changes per hour.

2. HVAC Functional Testing Checklist
 - a. Removed “Licensed Professionals” and added certain NEBB credentials to the list of qualified persons that can complete the Functional Testing Checklist. Also, made it more clear that unless the FT agent is an HVAC contractor credentialed by an H-QUITO, they cannot be the installing contractor and the FT Checklists must be collected.
 - b. For greater clarity, expanded the text in Section 5 to explicitly indicate that it applies to most systems, even those already subject to Section 2 and 3. The requirement to test inlet/outlet temperatures was also expanded from WLHPs to fan coils.

3. Rater Design and Field Checklist
 - a. Split these two checklists into two PDFs.
 - b. Further clarified that requirements do not apply to buildings on multifamily properties with no dwelling units (e.g. community centers), even if they are minimally attached (i.e., less than 10% of the wall area is an interior connection) to other buildings with dwelling units.
 - c. For reduced thermal bridging, increased the 5% exemption area to 10%, consistent with Homes, and clarified what specifically can be exempted (e.g., fasteners, projected balconies, PTAC openings), and what portions of the walls cannot (e.g., intermediate floor perimeters, steel columns).
 - d. For calculating total UA, clarified how fasteners and other interruptions in continuous insulation must be calculated.
 - e. Added an option for continuous interior insulation for gut rehabs, where exterior rigid is not feasible.
 - f. Added a gasket to the list of required air sealing measures needed for attic access panel and drop-down stairs and added insulating the attic access panel or drop-down stairs as another item under thermal bridging.
 - g. Clarified that the requirements that apply to “walls” include walls adjacent to unconditioned spaces within the building as well as adjacent to other buildings.

- h. For heated plenums, added a requirement that the insulation also be paper-faced to reduce air movement through the heated plenum.
 - i. Changed the common space lighting power density maximum for the Building Area method to match ASHRAE 90.1-2007 (0.7 W/ft² rather than 1 W/ft²).
 - j. Removed lighting power density for parking lots such that the only lighting requirement for parking lots is to have automatic controls (timer or photocell).
 - k. Removed the restriction on the number of items with an LP checkbox that can be verified by an LP and explicitly permit a non-Rater to measure the ventilation airflows in spaces other than the dwelling units, if overseen and in the presence of the Rater.
4. New Documents
- a. Posted the Draft National Program Requirements (NPR) document which contains the ENERGY STAR Multifamily Reference Design, ASHRAE Performance Targets, Eligibility, and Training requirements.
 - Note: The ENERGY STAR Multifamily Reference Design Exhibit is only applicable for the HERS and Prescriptive Paths. This document describes by state whether projects should follow the 1.0 and 1.1 version. The versions relate to which residential code the state has adopted. 1.0 corresponds to states currently following ENERGY STAR Certified Homes Version 3.0, and 1.1 corresponds to states following Version 3.1.
 - Note: The training is still under development
 - Update from April: For the ENERGY STAR Multifamily Reference Design Version 1.1, (i.e., for projects in states currently using ENERGY STAR Certified Homes Version 3.1), updated the furnace and AC efficiency requirements in climate zones 4 and 5 to align with the ENERGY STAR Certified Homes requirements.
 - b. Posted the Draft Target Procedure for both the 1.0 and 1.1 ENERGY STAR Multifamily Reference Designs
 - Note: This document outlines the procedure software vendors will use to create the benchmark ENERGY STAR Multifamily Reference Design for projects pursuing the HERS Path.
 - c. Posted the Draft Water Management System Builder Requirements
 - This will be a combined document for both Certified Homes and Multifamily
 - The only technical update is footnote 2a to allow an exemption from the capillary break for open garages or garages with ventilation