

BIG CHANGES FOR ENERGY STAR MULTI-FAMILY NEW CONSTRUCTION

Energy Star is a rating system available for buildings, issued by the U.S. Department of Energy and the U.S. Environmental Protection Agency. Energy Star provides certification programs based upon building type (homes, multi-family, commercial, industrial) and phase (renovation, new construction, operations). There are over 36,000 certified commercial buildings and 2.2 million certified homes nationwide.

As with many rating systems, Energy Star is in the process of adopting a new version for all multi-family projects, and its grace period ends July 1, 2021. With this new version, referred to as Energy Star Multi-Family New Construction, all residential buildings with more than one unit, or residential areas in mixed-use buildings, will be required to comply with the new version of the rating system if permitted after July 1, 2021.

The major impact of this version is that multi-family buildings with more than two units will no longer able to use Energy Star for New Homes. All multi-family buildings will need to follow guidelines of Energy Star Multi-Family New Construction, which are more in alignment with the former Multi-Family High Rise certification.

While there are several updates to the rating system compared to previous. iterations, this communication highlights a few that we know are important to understand early in the design and budgeting process because the performance testing and verification required can add to the construction costs, including labor, materials and schedule. Additionally, several prescriptive thresholds also impact traditional design standards as they depart from code-minimums.

A summary list of factors to consider include:

NEW REQUIREMENTS:

- Continuous. Insulation (R-5 or greater) required over 3 stories
- Domestic water heater efficiencies 85%
- Lighting control requirements for common spaces
- WaterSense Labeled Plumbing Fixtures
 - Shower flow rate 1.75 GPM max for prescriptive path
- Utility Data Acquisition 50,000SF and larger smart utility meters or data collection plan in place
- 3rd party systems commissioning (HVAC Functional Testing) now required

UPDATED & MORE STRINGENT REQUIREMENTS:

- A qualified functional testing agent is required for commissioning: Emerald is among a few on the National Directory
- Duct testing is more stringent with allowable leakage rates of only 6% leakage vs. the former allowable 8%
- Blower door tests have Pass/Fail, 0.3 CFM/SF (previous. testing was not pass/fail)
- Occupancy sensors/bi-level controls
- Exterior lighting on timers/photocell (ASHRAE 90.1-2010)

Every member of the project team has additional obligations to follow as part of the Energy Star Multi-family New Construction requirements, which may affect traditional scope and soft costs. We recommend the project estimator conduct a thorough review of the entire Energy Star Multi-Family New Construction requirements when developing cost estimates and bids.