2019 RESIDENTIAL NEW CONSTRUCTION PROGRAM

REQUIREMENTS AND SUBMISSION CHECKLIST

GENERAL PARTICIPATION REQUIREMENTS

To participate in the Residential New Construction (RNC) energy efficiency rebate program, dwelling units/buildings must meet technical requirements listed in the document. Applicants must **submit the RNC application form prior to insulating the home**. Applicants should fill out the "Initial Plan" section of the Residential New Construction Program Project Application (Application) form in its entirety.

BUILDING TYPE PARTICIPATION

- **A.** The following building types are eligible for RNC program participation:
 - Detached dwelling units (e.g. single family homes);
 - Dwelling units in any multifamily building with 4 units or fewer;
 - Dwelling units in multifamily buildings with 4 stories or fewer abovegrade;
 - Dwelling units in multifamily buildings with 5 stories above-grade
 that have their own heating, cooling and hot water systems, separate
 from other units, and where dwelling units occupy 90% or more of the
 occupiable square footage of the building. When evaluating mixed—

use buildings for eligibility, exclude commercial/retail space when

assessing whether the 90% threshold has been met.

Any building with a residential end-use that doesn't fall within these building-type requirements will be subject to the Multifamily Whole Building Performance Initiative (MWBI). Contact the Utility for MWBI program requirements.

- B. Dwelling units which will be constructed from the "ground-up" as well as units which will be "gut-rehabbed" or fully rehabilitated are eligible for program participation. For purposes of this program, gut-rehabbed buildings must expose all exterior walls and have a plan in place to reinsulate or for the existing insulation to meet RESNET® Grade 1 standards. Additionally, the remainder of the thermal envelope (ceilings, floors, etc.) must be reinsulated or inspected to meet RESNET Grade 1 standards. Gut-rehabbed buildings must also replace all existing windows or verify that existing windows meet the current ENERGY STAR® window standards.
 - Homes outside of these guidelines may be eligible to receive incentives under other utility programs, contact your utility Program Administrator for more details.
- C. All homes in United Illuminating (UI) and Eversource (Eversource) territory, which use natural gas, or electric, as their primary heating fuel are eligible to receive full rebates offered in the RNC program. All other homes will receive 50% of the total incentive.

PROGRAM COMPLIANCE REQUIREMENTS FOR HOME ENERGY RATING SYSTEMS (HERS) RATINGS

A. General Requirements

- a. Homes following this path must use a Residential Energy Services Network (RESNET)-certified HERS Rater approved in Connecticut. A listing can be found on EnergizeCT.com.
- **b.** It is encouraged that the project's initial application is submitted to the respective utility **BEFORE** construction. The cut-off time period for submitting the initial application is before drywall is installed.
- c. Each participating dwelling unit must have its own verified REM™/Rate file submitted electronically to the Utility. The REM/Rate file must be the final version and contain a RESNET Registry ID.
- d. The RNC program will recognize sampling procedures per RESNET Standards. Utilities will verify that the HERS Rater and their HERS Provider are RESNET approved to conduct sampling.

B. Technical Requirements

- a. Must install whole-house mechanical ventilation that meets ASHRAE 62.2-2010 guidelines. Examples of ventilation options include exhaust only, supply only, or balanced systems. System must be tested by HERS Rater for properly configured air flow.
- b. Must install ENERGY STAR certified LED lighting in 100% of lighting fixtures. Exceptions can be made on a case-by-case basis if LED products are not available or not appropriate for a specific fixture in the home. Please contact the applicable Utility to discuss the situation before the project completes. Please document all ENERGY STAR certified LED lighting installed and submit the lighting inventory sheet on page 2 of this RNC Requirements and Submission Checklist.
- c. Must have an ENERGY STAR refrigerator, clothes washer and dishwasher.
- d. In order to verify the thermal envelope, the HERS Rater is required to perform a visual inspection prior to drywall using the most current version of the IECC Air Barrier and Insulation Inspection Component Criteria (Table 402.4.2). The HERS Rater must submit documentation that this inspection has been performed, either through pictures or a checklist, that verifies that the requirements have been met. The thermal envelope must be installed to RESNET Grade 1 standards.

- e. A post-construction blower door test must be conducted. Total thermal barrier air leakage must be 3 ACH50 or less for all single family homes. Non single-family low-rise attached dwelling unit buildings greater than 850 square feet of floor area, shall have air leakage threshold of 5 ACH50 or less. For dwelling units less than or equal to 850 square feet of floor area, the air leakage threshold shall be set at 6.5 ACH50.
- f. If the dwelling unit contains air ducts for heating and/or cooling supply, a post-construction duct leakage test must be conducted where total duct leakage cannot exceed 8 CFM25 per 100 SF or 80 CFM25.
- g. Heating and cooling equipment sizing must be submitted and reviewed by HERS Rater in accordance with most current version of the IECC Section R403.6.
- h. Single-family homes applying and qualifying for Tier 2 and 3 HERS Rating must meet the 2019 Zero Energy Ready Home PV-Ready Checklist (Connecticut Version). Homes not meeting this requirement will only be eligible for Tier 1 HERS Rebates. Any unforeseen reasons that cause a project to not meet the PV-Ready requirements can be discussed with the Utility for further review. Include a copy of an invoice or contract of any renewables system that is part of the project.
- i. If HERS Rater states that the REM file is Grade 1 install, with Fiberglass Batts, pictures will be required with submittal documents. At least 2 pictures with a maximum of 5 surface photos must be submitted.
- For Tier 3 applicants, rebates will be paid below a HERS of 40, and to a maximum of a HERS of 0. Tier 3 applicants must also meet the requirements of the 2019 EV-Ready Checklist.
- k. If an electric resistance storage water heater is used to provide domestic hot water, the EF must be at least 0.95 (UEF ≥ 0.93), R-4 pipe insulation must be installed, kitchen faucets must be ≤ 2.0 gpm, and at least 2/3 of all toilets, bathroom faucets/aerators, and showerheads must be WaterSense™ certified or equivalent.
- I. For Single Family Attached and Multifamily projects, if an integrated heat pump water heater (HPWH) is used to provide domestic hot water, the EnergizeCT Multifamily Heat Pump Water Heater Guidelines must be met and verified by the HERS Rater. Where the guidelines cannot be met in their entirety for the given installation, a HPWH shall be modeled with a UEF of 0.95

2019 RESIDENTIAL NEW CONSTRUCTION APPLICATION SUBMISSION CHECKLIST

The checklist below is intended to ensure that builders, contractors, homeowners, or other applicants of the 2019 Residential New Construction (RNC) program have included all necessary documentation and information required for rebate approval.

REQUIRED PAPERWORK:
Paperwork required to be submitted PRIOR TO construction:
Applicant or HERS Rater will submit the completed Application with the "Initial Plan" indicating the "Estimated Total" rebate inclusive of all necessary signatures.
□ W-9 Form
☐ Initial REM/Rate file, submitted electronically to Utility involved only for projects that have an estimated initial HERS rating below 40.
Paperwork required to be submitted <u>AFTER</u> construction has been completed:
Applicant or HERS Rater will submit the completed Application with the "As Built" conditions indicating the "Installed Total" rebate requested as well as the required documentation (as applicable) outlined below:
☐ Electronic REM/Rate file
Eversource customers: e-mail to Nick Jones at nicholas.jones@eversource.com
UI/SCG/CNG customers: e-mail to Glen Eigo at glen.eigo@uinet.com
HERS Rater must submit a final Home Energy Rating Certificate (HERC) after successful verification by the HERS Rater's provider.
☐ All Bonus Certification documentation if applicable.
AHRI certificates for mechanical systems and invoices for insulation.
Low Income Verification Letter, available through the Utility (if applicable).
2019 RNC PV Readiness Checklist (if applicable).
□ 2019 RNC EV Readiness Checklist (If Applicable)











Energize Connecticut – programs funded by a charge on customer energy bills.

Page 2 of 2 W0265 Rev. 01/19