ENERGY STAR: The Year Ahead
(Featuring Single-Family New Homes Rev. 14)

January 27, 2025

United States Environmental Protection Agency

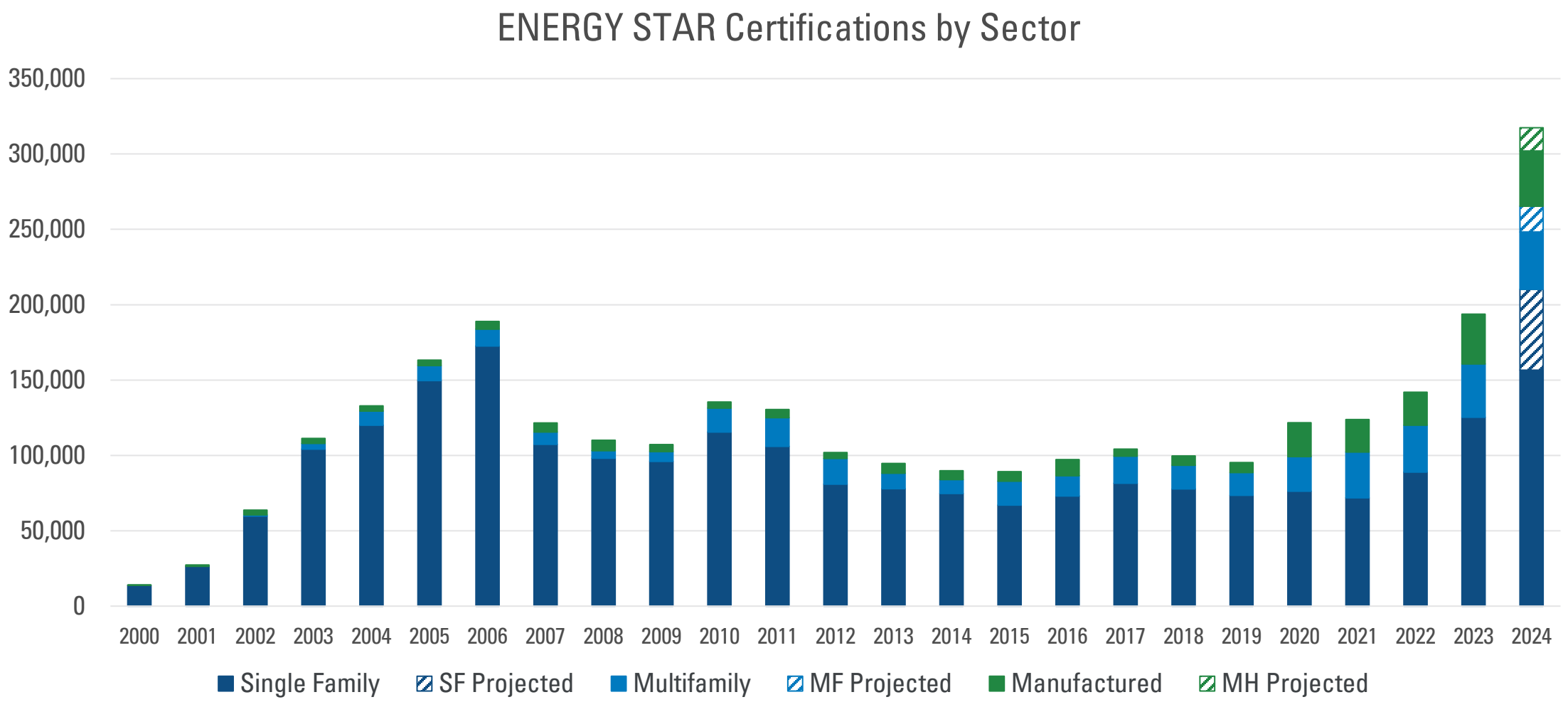
Three Key Things To Know

Update on the § 45L Federal Tax Credit.

New ENERGY STAR Program Versions released.

Simplification of ENERGY STAR Program Requirements through annual revisions.

There’s nothing like a tax credit!



Update on the § 45L Federal Tax Credit

- For homes **acquired in 2025**:
  - Single-family: **v3.2** is the *minimum* eligible version required in most states (except CA and HI, where regional program requirements apply).
  - Multifamily: **v1.1** remains the *minimum* eligible version required until 2027 (except in CA; and OR/WA, which have additional options).

- Despite this, for single-family homes, v3.1 remains valid for ENERGY STAR certification in most states (though it does not qualify for the tax credit).
  - Exceptions where v3.2 is required for certification in 2025: CT, FL, MD, NJ, OR, VT, and WA.

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New ENERGY STAR Program Versions Released

- Earlier this month, EPA released SFNH v3.3 and MFNC v1.3.
  - These new versions were developed in response to the 2024 IECC and will only be required in states that adopt this latest code or equivalent -- but are available to all partners for optional use.

- Key things to know about the new versions:
  - More stringent ERI targets (45-50 for SFNH; and 40-50 for MFNC).
  - Infiltration backstop of 3.5 ACH50, with alternative metrics for small homes and attached homes, and an allowance of 4 ACH50 for homes permitted prior to 1/1/2027.
  - Thermal envelope backstop aligned with the 2024 IECC performance paths:
    - In CZ 1-2, ≤ 108% of the total TC per 2024 IECC Table 402.1.2; and
    - In CZ 3-8, ≤ 115% of the total TC per 2024 IECC Table 402.1.2

New ENERGY STAR Program Versions and the § 45L Federal Tax Credit

- Based on the timelines prescribed in the tax code, EPA anticipates that SFNH v3.3 and MFNC v1.3 will become the minimum eligible versions required for the § 45L Tax Credit:
  - In 2028, for single-family homes; and
  - In 2029, for multifamily dwelling units.

- However, based on IRA guidance, newer versions of the program requirements can be used to satisfy the minimum requirements for the § 45L tax credit in a given year.
  - **In 2025, a home certified to SFNH National Version 3.3 also meets the minimum eligible version for the § 45L tax credit this year, which is SFNH National v3.2.**

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Simplification of ENERGY STAR Program Requirements

- With SFNH Revision 14 and MFNC Revision 5, EPA has significantly streamlined the prescriptive requirements of the Thermal Enclosure Checklist.
  - With this, we've been able to eliminate **33** footnotes from the program documentation - representing ~**20%** of the footnotes associated with mandatory measures (for SFNH).

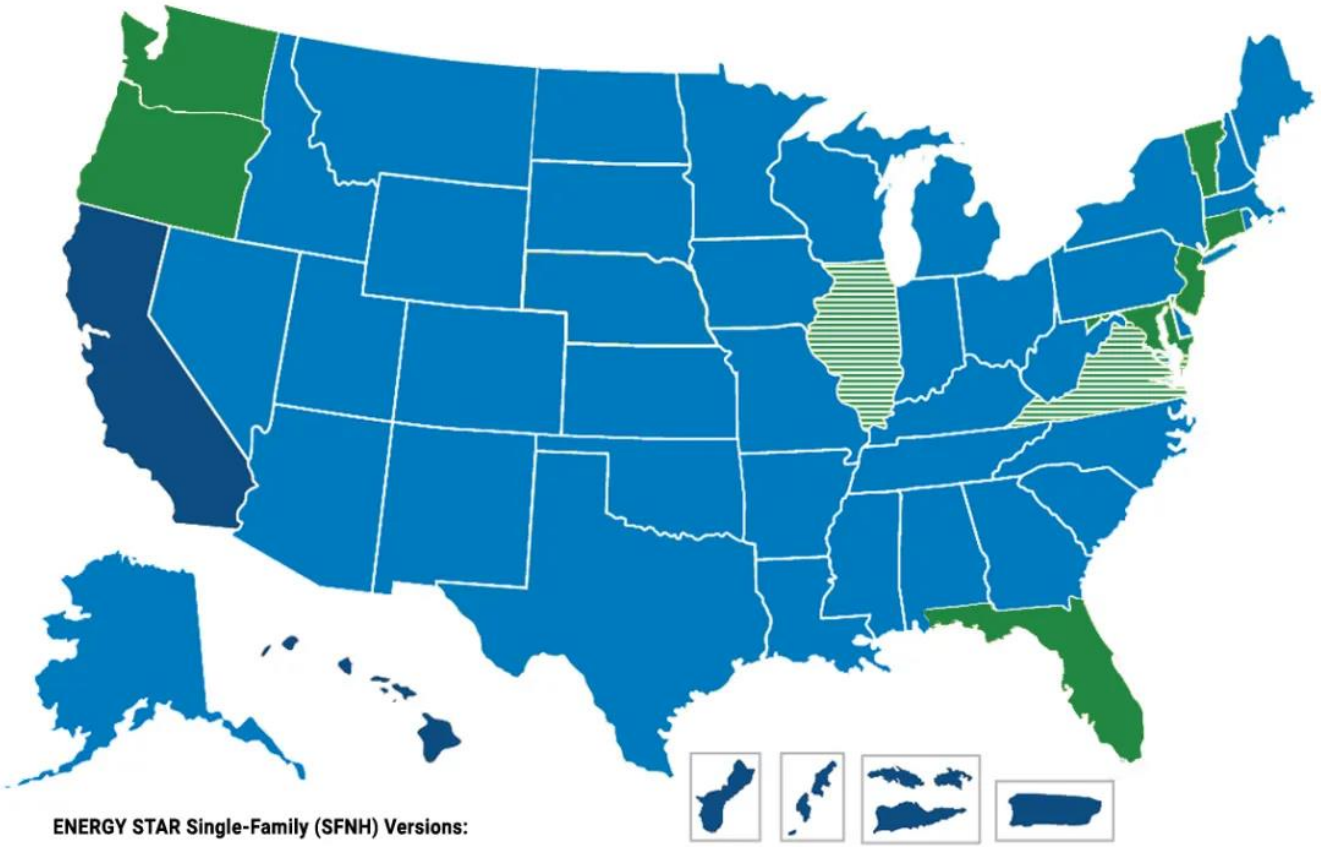
- We also entirely eliminated the Water Management Checklist.
  - These measures are largely required by code and remain as best practices.

- Next up for 2025: Tackling the HVAC Checklists!

Single-Family New Homes (SFNH)

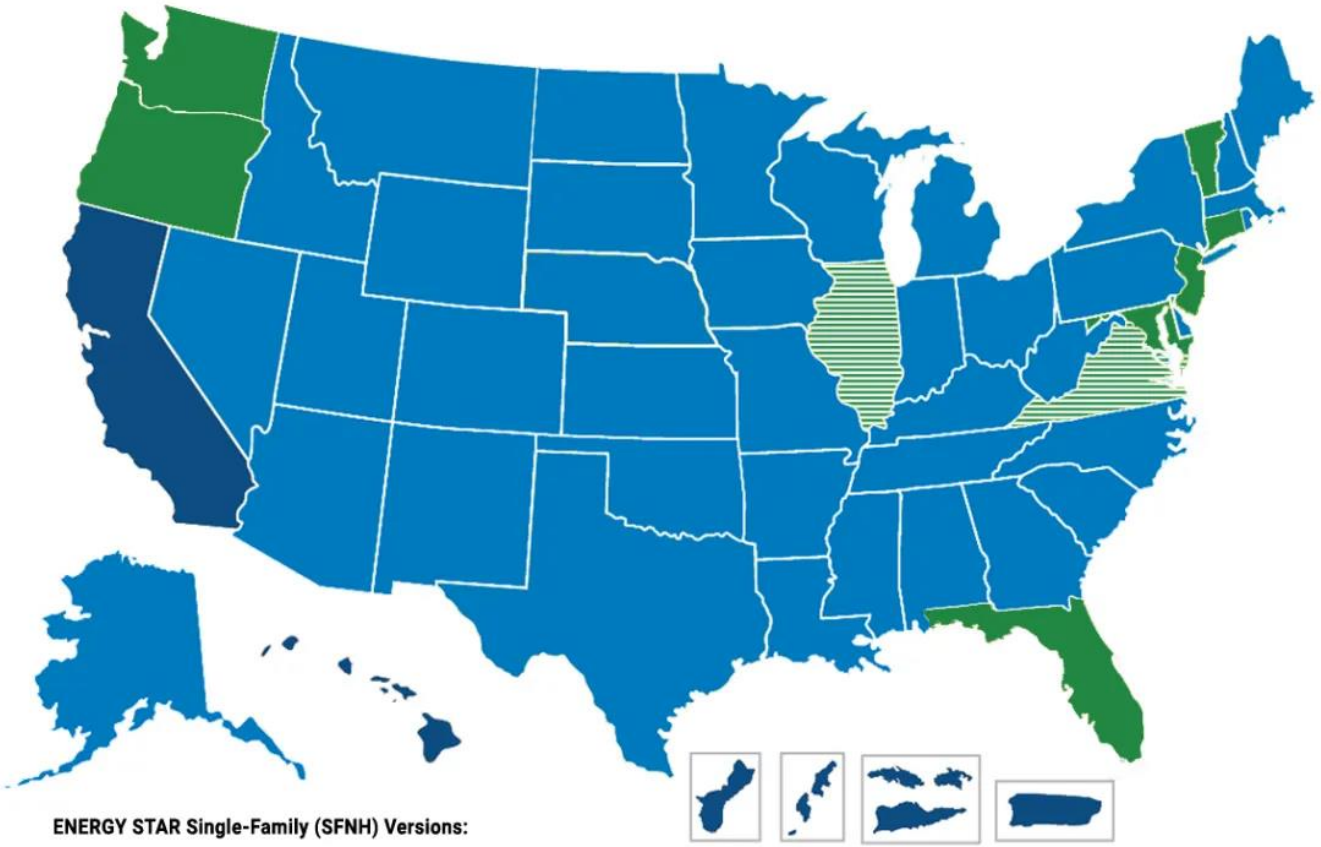
Current SFNH Program Versions

National Version 3.1



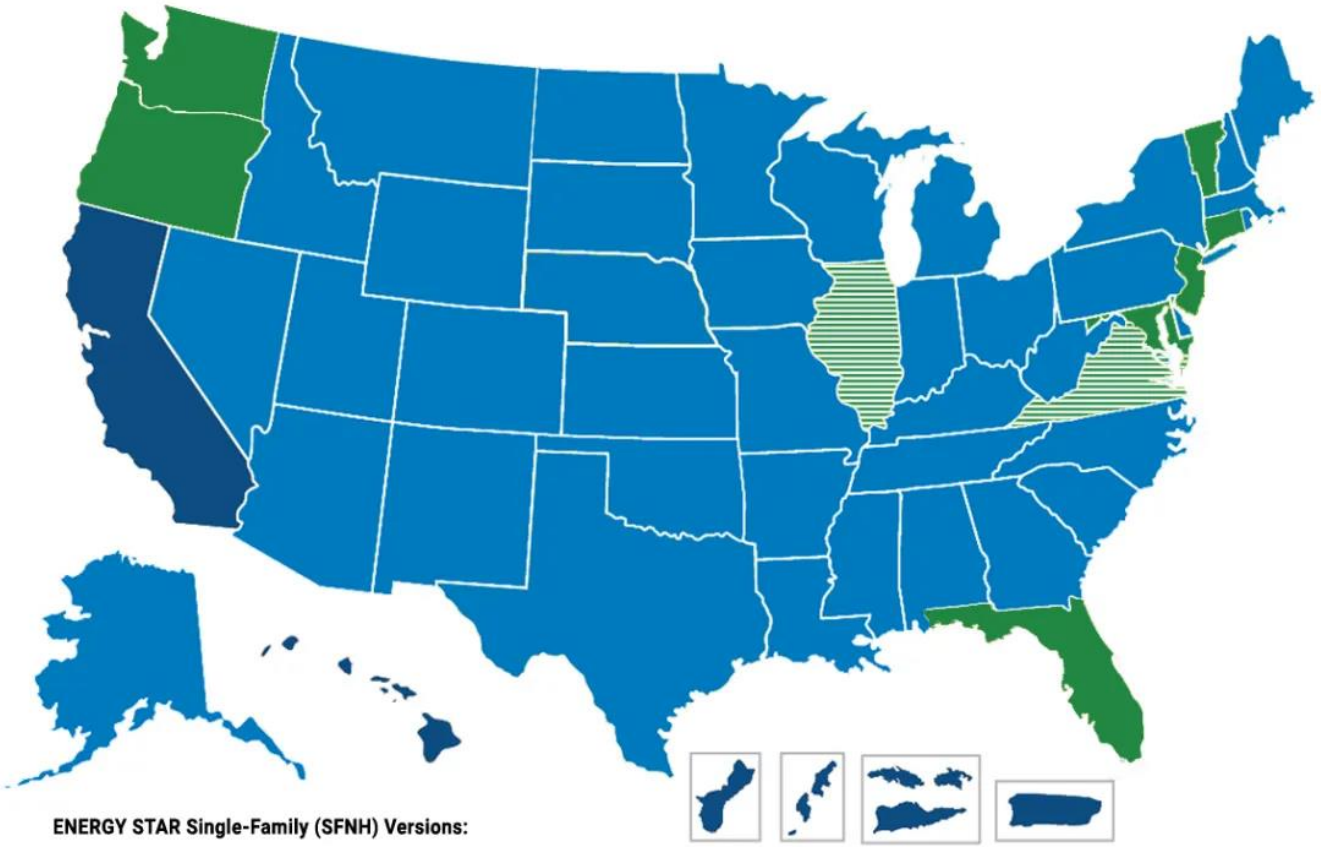
- Now required for certification in most states.
- ENERGY STAR ERI Target of ~55-65.
- In addition to ERI target, there are mandatory requirements that lock in key features related to comfort, air quality, and durability.

National Version 3.2



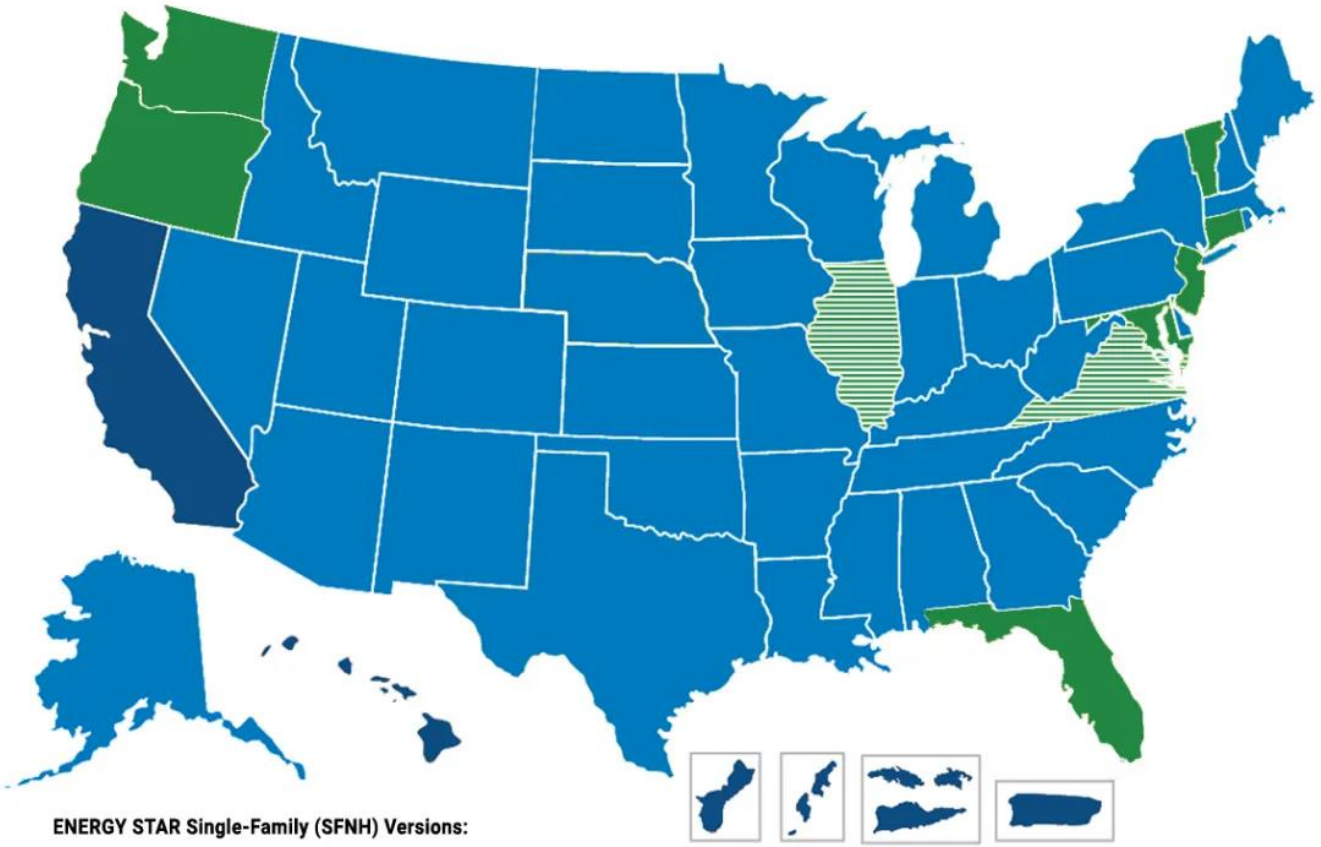
- Required for certification:
  - In CT, FL, MD, NJ, OR, VT, & WA for permits on or after 01/01/2025.
  - In IL & VA for permits on or after 01/01/2026.
- ENERGY STAR ERI Target of ~45-55.
- Same mandatory requirements as National Version 3.1, except for more stringent thermal backstop.
- *Rev. 14 adds an infiltration backstop, which is more stringent in National v3.2.

National Version 3.3



- Will not be required for certification before 01/01/2028.
  - But is allowed to be used before then.
- ENERGY STAR ERI Target of ~45-50.
- Same mandatory requirements as National Version 3.2, except for:
  - More flexible thermal backstop.
  - A more stringent infiltration backstop.

Regional Requirements



- FL Version 3.1 and OR-WA v3.2 sunset for permits on or after 01/01/2025.
- CA v3.2, v3.3, v3.4, v3.5: dependent on plan approval date, permit date, and edition of state code enforced for the home being certified.
- Pacific v3.2 for permits on or after 01/01/2026. Pacific v3 prior to then.
- Caribbean v3 – not anticipating any changes in the year ahead.

Sampling Sunset

Sampling sunset

- Sampling inspection protocols have been sunset single-family homes and all townhouses permitted on or after Jan. 1, 2025.
- Outside of AZ and CA, over 95% of single-family certifications in 2022 were based on individual inspections of each home.
- With the exception of townhouses, sampling inspection protocols remain authorized for building types eligible to be certified under the MFNC program.

Introducing Revision 14

What is a Revision?

1. It clarifies
2. It simplifies
3. It improves

Primary goals for Revision 14

a) Enhance quality assurance and quality control:
   - By reducing the number of requirements that are not Rater-verified
   - By adding objective performance targets

b) Simplify program by exchanging several lower-impact mandatory measures for performance-based approaches.

Overview

- Themes:
  - Rev. 08 – It's Great!
  - Rev. 09 – It's Fine…
  - Rev. 14 – Lean & Clean

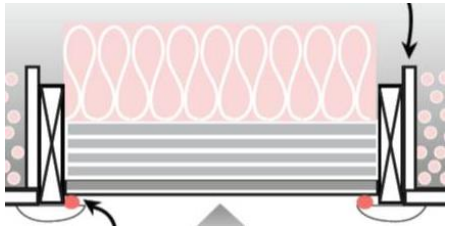
- What we'll cover today:
  - 5 big changes (and one big thing that did not change)
  - 5 smaller changes, clarifications, and refinements

Five big changes (and one non-change)

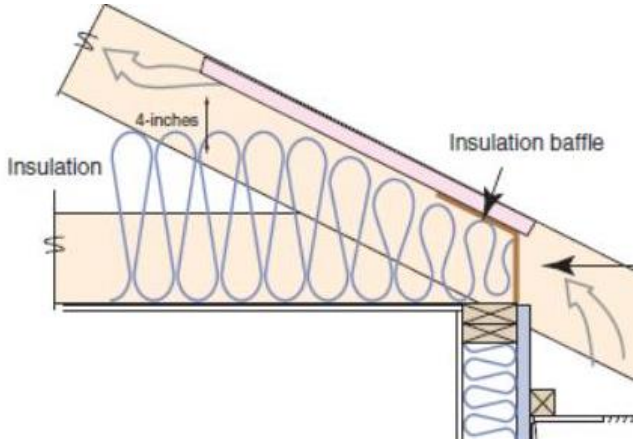
#1 of 5. National Rater Field Checklist: **Eliminated mandatory reduced thermal bridging details**

Background

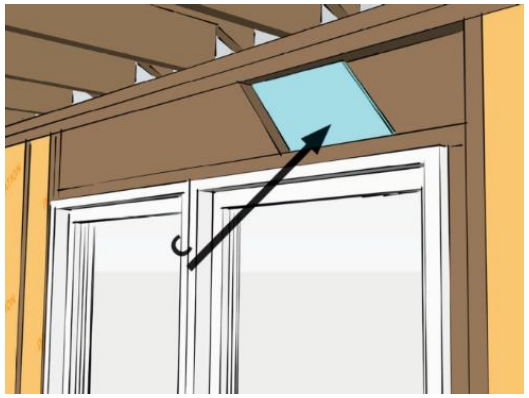
- Prior to Rev. 14, homes were required to meet several mandatory details that reduce thermal bridging, unless the home qualified for one or more exemptions.
- These encompassed the attic edge, attic platforms and hatches, above-grade walls, and slab edges.



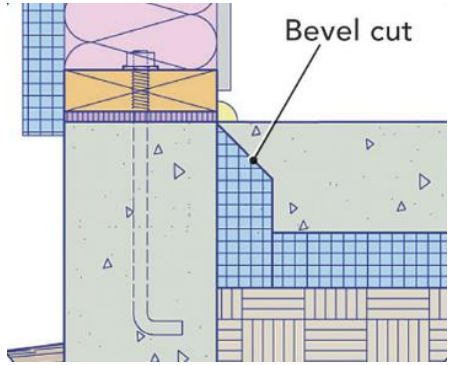
Attic Hatch



Attic Edge



Walls



Slab Edge

Background

- These details improved comfort and efficiency, when incorporated.
- However, numerous exemptions were added to the program.
- Furthermore, the ANSI standard for ratings advanced to better capture these details in energy modeling.

Overview of change

- Converted mandatory features to a list of details that must be assessed so they can be accurately reflected in the final energy model.

Rev. 13 Rater Field Checklist

3. Reduced Thermal Bridging				
3.1 For insulated ceilings with attic space above (i.e., non-cathedralized), Grade I insulation extends to the inside face of the exterior wall below and is ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8. [8, 14]	☐	☐	☐	☐
3.2 For slabs on grade in CZ 4-8, 100% of slab edge insulated to ≥ R-5 at the depth specified by the 2009 IECC and aligned with the thermal boundary of the walls. [8, 15, 16]	☐	☐	☐	☐
3.3 Insulation beneath attic platforms (e.g., HVAC platforms, walkways) ≥ R-21in CZ 1-5; ≥ R-30 in CZ 6-8.[8]	☐	☐	☐	☐
3.4 At above-grade walls separating conditioned from unconditioned space, one of the following options used (rim / band joists exempted): [17]				

Rev. 14 Rater Field Checklist

3. Reduced Thermal Bridging – Reduced thermal bridging strategies are not mandatory. However, the following details must be accurately assessed per ANSI / RESNET / ICC 301. [15]				
3.1 Insulated ceilings assessed at the attic edge for variance in R-value and install quality.	☐	-	☐	☐
3.2 Insulation assessed beneath attic platforms and walkways for variance in R-value and install quality.	☐	-	☐	☐
3.3 Attic access panels, drop-down stairs, & whole-house fans assessed for insulated covers.	☐	-	☐	☐
3.4 Above-grade walls separating conditioned from unconditioned space assessed for advanced framing.	☐	-	☐	☐
3.5 Slabs on grade assessed for insulation where walls separate conditioned from unconditioned space.	☐	-	☐	☐

For example, mandatory requirement for slab insulation is now a mandatory assessment of whether insulation is present.

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Overview of change

- With Rev. 14, homes are no longer mandated to include slab edge insulation, advanced framing, etc. However, homes without such features will have to compensate with others to achieve the ERI target and thermal backstop.

Sample National Version 3.2 Home in CZ 2

Wall Framing	ERI	UA
Standard	54	185
Advanced	53	174
Impact	1	11 (2%)

Overview of change

- Eliminated 13 footnotes that contained guidance and exemptions:

14 15. The minimum designated R values must be achieved regardless of the trade-offs determined using an equivalent U-factor or UA alternative calculation. Note that if the minimum designated values are used, then higher insulation values may be needed elsewhere to meet Item 1.2. Also, note that these requirements can be met by using any available strategy, such as a raised heel truss, alternate framing that provides adequate space, and / or high density insulation.

15 16. Slab edge insulation is only required for slab on grade floors with a floor surface less than 12 inches below grade. Slab insulation shall extend to the top of the slab to provide a complete thermal break. If the top edge of the insulation is installed between the exterior wall and the edge of an interior, or exterior, slab, it shall be permitted to be cut at a 45 degree angle away from the exterior wall. The following alternatives apply:

a. Slab assemblies with an F-Factor equivalent to that of the insulation required in Item 3.2 may be used. F-Factors shall be determined using Table A6.3.1.1 from ASHRAE 90.1-2022 Appendix A. See www.energystar.gov/F-Factor for more details.

b. The thermal break is permitted to be created using ≥ R-3 rigid insulation on top of the slab. In such cases, up to 10% of the slab surface is permitted to not be insulated (e.g., for sleepers, for sill plates). Insulation installed on top of slab shall be covered by a durable floor surface (e.g., hardwood, tile, carpet).

16 17. Where an insulated wall separates a garage, patio, porch, or other unconditioned space from the conditioned space of the house, slab insulation shall also be installed at this interface to provide a thermal break between the conditioned and unconditioned slab. Where specific details cannot meet this requirement, partners shall provide the detail to EPA to request an exemption prior to the home's certification. EPA will compile exempted details and work with industry to develop feasible details for use in future revisions to the program. A list of currently exempted details is available at: energystar.gov/slabedge.

17 18. Mass walls utilized as the thermal mass component of a passive solar design (e.g., a Trombe wall) are exempt from this Item. To be eligible for this exemption, the passive solar design shall be comprised of the following five components: an aperture or collector, an absorber, thermal mass, a distribution system, and a control system. For more information, see: energy.gov/sites/prod/files/guide_to_passive_solar_home_design.pdf.

Mass walls that are not part of a passive solar design (e.g., CMU block or log home enclosure) shall either utilize the strategies outlined in Item 3.4 or the pathway in the assembly with the least thermal resistance, as determined using a method consistent with the 2013 ASHRAE Handbook of Fundamentals, shall provide ≥ 50% of the applicable assembly resistance, defined as the reciprocal of the mass wall equivalent U-factor in the 2009 IECC Table 402.1.3. Documentation identifying the pathway with the least thermal resistance and its resistance value shall be collected by the Rater and any Builder Verified or Rater Verified box under Item 3.4 shall be checked.

18 19. Up to 10% of the total exterior wall surface area is exempted from the reduced thermal bridging requirements to accommodate intentional designed details (e.g., architectural details such as thermal fins, wing walls, or masonry fireplaces; structural details, such as steel columns). It shall be apparent to the Rater that the exempted areas are intentional designed details or the exempted area shall be documented in a plan provided by the builder, architect, or engineer. The Rater need not evaluate the necessity of the designed detail to certify the home.

19 20. If used, insulated siding shall be attached directly over a water-resistive barrier and sheathing. In addition, it shall provide the required R-value as demonstrated through either testing in accordance with ASTM C-1363 or by attaining the required R-value at its minimum thickness. Insulated sheathing rated for water protection can be used as a water resistant barrier if all seams are taped and sealed. If non-insulated structural sheathing is used at corners, the advanced framing details listed in Item 3.4.3 shall be met for those wall sections.

20 21. Steel framing shall meet the reduced thermal bridging requirements by complying with Item 3.4.1 of the Checklist.

21 22. Double-wall framing is defined as any framing method that ensures a continuous layer of insulation covering the studs to at least the R-value required in Item 3.4.1 of the Checklist, such as offset double-stud walls, aligned double-stud walls with continuous insulation between the adjacent stud faces, or single-stud walls with 2x2 or 2x3 cross-framing. In all cases, insulation shall fill the entire wall cavity from the interior to exterior sheathing except at windows, doors and other penetrations.

22 23. All advanced framing details shall be met except where the builder, architect, or engineer provides a framing plan that encompasses the details in question, indicating that structural members are required at these locations and including the rationale for these members (e.g., full-depth solid framing is required at wall corners or interior / exterior wall intersections for shear strength, a full-depth solid header is required above a window to transfer load to jacks studs, additional jack studs are required to support transferred loads, additional cripple studs are required to maintain on-center spacing, or stud spacing must be reduced to support multiple stories in a multifamily building). The Rater shall retain a copy of the detail and rationale for their records, but need not evaluate the rationale to certify the home.

23 24. All exterior corners shall be constructed to allow access for the installation of ≥ R-6 insulation that extends to the exterior wall sheathing. Examples of compliance options include standard density insulation with alternative framing techniques, such as using three studs per corner, or high density insulation (e.g., spray foam) with standard framing techniques.

24 25. Compliance options include continuous rigid insulation sheathing, SIP headers, other prefabricated insulated headers, single member or two member headers with insulation either in between or on one side, or an equivalent assembly. R-value requirement refers to manufacturer's nominal insulation value.

25 26. Insulation shall run behind interior / exterior wall intersections using ladder blocking, full length 2x6 or 1x6 furring behind the first partition stud, drywall clips, or other equivalent alternative.

26 27. In Climate Zones 6 – 8, a minimum stud spacing of 16 in. o.c. is permitted to be used with 2x6 framing if ≥ R-20.0 wall cavity insulation is achieved. However, all 2x6 framing with stud spacing of 16 in. o.c. in Climate Zones 6 – 8 shall have ≥ R-20.0 wall cavity insulation installed regardless of any framing plan or alternative equivalent total UA calculation. ##

How to make use of optional bridging details

- If you want to use the optional reduced thermal bridging details in Section 3, you must certify the home using Rev. 14 of the National Rater Field Checklist in its entirety.

#2 of 5. National Rater Field Checklist: **Streamlined air sealing details and added an air leakage (blower door) backstop**

Background

- Homes are required to be air-sealed to promote efficiency, comfort, & durability.
- Prior to Rev. 14, this was accomplished through ten mandatory air sealing details.
- We believe that mandatory details combined with a pre-drywall Rater inspection is the most cost-effective way to achieve a tight home.

Overview of change

- Refined (rather than overhauled) mandatory air sealing details.
- Added a new mandatory enclosure air leakage ‘backstop’ for all homes.

Refined air sealing details

4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with durable ~~≥ R-10~~ covers that ~~is~~ are gasketed ~~(i.e., not caulked)~~. ~~Fan covers either installed on house side or mechanically operated.~~

a) Refined requirement regarding attic access panels, drop-down stairs, and whole house fans.
   - Moved R-10 insulation requirement to Section 3 – Reduced Thermal Bridging, because it is not an air sealing measure.
   - Refined wording to better align with Multifamily New Construction program.

Refined air sealing details

4.1.~~3~~2 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed. ~~Also, if in insulated ceiling without attic above, exterior surface of fixture insulated to ≥ R-10 in CZ 4-8.~~[8]

b) Eliminated requirement to insulate exterior surface of recessed lighting fixtures in cathedral ceilings in cold climates.

- It was not applicable to most certified homes.
- It was an insulation, rather than air sealing, measure.
- It was difficult for Raters to verify.

Refined air sealing details

4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces, ~~using caulk, foam, or drywall~~ Drywall adhesive (but not other construction adhesives) is permitted to be used ~~or equivalent material. Either apply sealant directly between drywall and top plate or to the seam between the two from the attic above.~~

c) Reworded requirement to seal drywall to top plates.

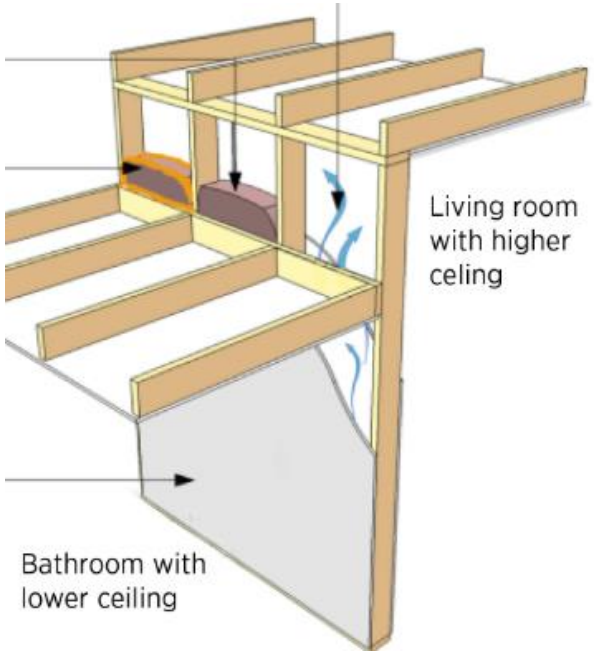
- Edited for conciseness and to emphasize that sealant can be applied between drywall and top plate during installation, or from the attic side after installation.
- No change in intent.

Refined air sealing details

~~4.4 Continuous top plate or blocking is at top of walls adjoining unconditioned space, and sealed.~~

d) Eliminated requirement for continuous top plate or blocking at top of walls.

- Originally added to ensure a six-sided air barrier for wall insulation, particularly where there are changes in wall height.
- However, this requirement is now addressed in ANSI / RESNET / ICC 301, which requires a six-sided air barrier for fibrous batt and fibrous loose fill insulation to achieve Grade I or II.



Refined air sealing details

4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor. ~~Gasket also placed beneath above grade sill plate if resting atop concrete / masonry & adjacent to cond. space.~~

e) Eliminated requirement to include gasket beneath above-grade sill plates.

- This was the only air-sealing measure not practical to correct, if missed.
- It is still possible to build a tight home without this individual measure.
- As a best practice, partners can still include a gasket to improve air sealing and, in particular, moisture migration from the foundation.

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Refined air sealing details

4.1.9 In ~~multifamily buildings~~ townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries~~the gap between the common wall (e.g., the drywall shaft wall) and the structural framing between units sealed at all exterior boundaries~~.

f) Reworded requirement to seal common wall in townhouses and duplexes.

- This item referenced multifamily buildings, but the only attached buildings still eligible to be certified through the SFNH program are townhouses and duplexes.
- No change in intent.

Refined air sealing details

~~28. In Climate Zones 1 through 3, a continuous stucco cladding system adjacent to sill and bottom plates is permitted to be used in lieu of sealing plates to foundation or sub-floor with caulk, foam, or equivalent material.[8]~~

~~29. In Climate Zones 1 through 3, a continuous stucco cladding system sealed to windows and doors is permitted to be used in lieu of sealing rough openings with caulk or foam.[8]~~

g) Removed two air-sealing exemptions related to stucco cladding: one for air sealing the sill plate to foundation or sub-floor and one for air sealing rough openings around windows and doors.

- Stucco cladding is not airtight.
- These are relatively inexpensive air sealing details to implement.
- Removing the exemptions and requiring these air sealing details to be completed simplified the program and should result in more consistent outcomes.

Refined air sealing details

Rev. 14 Rater Field Checklist

4. Air Sealing				
4.1 Rater has verified each air sealing detail below. In addition, the home must meet Item 4.2. Unless otherwise noted below, "sealed" indicates the use of caulk, foam, or equivalent material.				
4.1.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	≤ 5 penetrations ☐	☐	-
4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-	☐ 📷	☐
4.1.3 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed.	☐	No Limit ☐	☐	☐
4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces. Drywall adhesive (but not other construction adhesives) is permitted to be used.	☐	No Limit ☐	☐	☐
4.1.5 Rough opening around windows & exterior doors is sealed.	☐	-	☐	-
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-	☐ 📷	☐
4.1.7 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions are made substantially air-tight with weatherstripping or equivalent gasket.	☐	-	☐	☐
4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor.	☐	No Limit ☐	☐	☐
4.1.9 In townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries.	☐	No Limit ☐	☐	☐

- Eliminated one detail
- Refined five details
- Four details are unchanged
- Removed two stucco exemptions

Added a new mandatory air leakage ‘backstop’

- Homes that meet mandatory air sealing measures should be reasonably tight.
- An energy rating already requires that enclosure leakage rate be measured.
- An enclosure leakage rate ‘backstop’ objectively ensures that all certified homes meet our intent.
- This ‘backstop’ is the worst rate allowable in a certified home.

Added a new mandatory air leakage 'backstop'

4.2 Rater-measured air leakage of Dwelling or Dwelling Unit meets one of the following: [16]		
4.2.1	For all Versions except those noted below:	≤ 4.5 ACH50
	For National v3.2 and CA v3.4:	≤ 4.0 ACH50 (see exception in Fn. 17) [17]
	For National v3.3 and CA v3.5:	≤ 3.5 ACH50 (see exception in Fn. 17) [17]
4.2.2 As an alternative, for a Dwelling with ≤ 1,500 sq. ft. of Conditioned Floor Area, a Townhouse, or an attached Dwelling Unit, air leakage is ≤ 0.30 CFM50 per sq ft. of Dwelling Unit Compartmentalization Boundary area.		

- ~85% of single-family homes with confirmed rating met this target in 2023.

- ~70% of single-family homes with confirmed rating met this target in 2023.
- If permitted before 01/01/2027 and certified using CA v3.4, an air leakage limit of ≤ 4.5 ACH50 applies.

- ~55% of single-family homes with confirmed rating met this target in 2023.
- If permitted before 01/01/2027 and certified using National v3.3, leakage limit of ≤ 4.0 ACH50 applies.
- If permitted before 01/01/2027 and certified using CA v3.5, leakage limit of ≤ 4.5 ACH50 applies.

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Added a new mandatory air leakage ‘backstop’

4.2 Rater-measured air leakage of Dwelling or Dwelling Unit meets one of the following: [16]		
4.2.1 For all Versions except those noted below:	≤ 4.5 ACH50	
For National v3.2 and CA v3.4:	≤ 4.0 ACH50 (see exception in Fn. 17) [17]	
For National v3.3 and CA v3.5:	≤ 3.5 ACH50 (see exception in Fn. 17) [17]	
4.2.2 As an alternative, for a Dwelling with ≤ 1,500 sq. ft. of Conditioned Floor Area, a Townhouse, or an attached Dwelling Unit, air leakage is ≤ 0.30 CFM50 per sq ft. of Dwelling Unit Compartmentalization Boundary area.		

- Less stringent limit applies to small dwellings, townhouses, and attached dwelling units (i.e., duplex).

How to make use of streamlined sealing details

- If you want to use the streamlined air sealing details in Section 4, you must certify the home using Rev. 14 of the National Rater Field Checklist in its entirety.

#3 of 5. National Rater Field Checklist: **Narrowed the scope of builder-verified items**

Background

- Prior to Rev. 14, at the discretion of the Rater, builders were permitted to verify up to eight checklist items.
- We provided little guidance on how much of each item was permitted to be verified by the builder.

For example, when builder-verified, are builders permitted to verify air barrier for the entire ceiling, or just a subset?

Item 2.1 Fully-aligned air barrier for dropped ceilings / soffits below unconditioned attics, and all other ceilings

Overview of change

- Triaged Items into three groups – those that:
  a) May not be verified by the builder because of ease of Rater verification or importance.
  b) May be partially verified by the builder but should not be wholly builder-verified.
  c) May be fully verified by the builder due to logistical issues.

- Reduced allotment of builder-verified items from eight to five.

Overview of change

Thermal Enclosure System 1. High-Performance Insulation & Fenestration	Must Correct	Builder Verified [1]	Rater Verified [2, 3]	N/A [4]
1.1 Insulation meets specifications in National Rater Design Review Checklist Item 2.1.	☐	Pre-rock+50 ☐	☐	-
1.2 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 5. [5, 6]	☐	Pre-rock+50 ☐	☐	-
1.3 Fenestration meets specifications in National Rater Design Review Checklist Items 2.1 & 2.2.	☐	-	☐	-

Not eligible to be builder verified.

Up to 500 sq. ft. of wall areas that have drywall installed prior to general installation of drywall (i.e., “pre-rock” areas such as walls behind tubs or staircases), plus an additional 50 sq. ft., may be builder verified.

Overview of change

2. Fully-Aligned Air Barriers [7] - At each insulated location below, a complete air barrier is provided that is fully aligned as follows:					
Ceilings: At interior or exterior horizontal surface of ceiling insulation in Climate Zones 1-3; at interior horizontal surface of ceiling insulation in Climate Zones 4-8. Also, at exterior vertical surface of ceiling insulation in all climate zones (e.g., using a wind baffle that extends to the full height of the insulation in every bay or a tabbed baffle in each bay with a soffit vent that prevents wind washing in adjacent bays). [8, 9]					
2.1 Dropped ceilings / soffits below unconditioned attics, and all other ceilings.	☐	≤ 50 sq. ft. ☐	☐	☐	
Walls: At exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in Climate Zones 4-8. [9, 10]					
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	≤ 50 sq. ft. ☐	☐	☐	
2.3 Attic knee walls and skylight shaft walls. [11]	☐	≤ 50 sq. ft. ☐	☐	☐	
2.4 Walls adjoining porch roofs or garages.	☐	≤ 50 sq. ft. ☐	☐	☐	
2.5 Double-walls and all other exterior walls.	☐	≤ 50 sq. ft. ☐	☐	-	
Floors: At exterior vertical surface of floor insulation in all climate zones and, if over unconditioned space, also at interior horizontal surface including supports to ensure alignment. Alternatives in Footnotes 13 & 14. [12, 13, 14]					
2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.	☐	≤ 50 sq. ft. ☐	☐	☐	
2.7 All other floors adjoining unconditioned space (e.g., rim / band joists at exterior wall or at porch roof).	☐	≤ 50 sq. ft. ☐	☐	☐	

Up to 50 sq. ft. of area may be verified by the builder

Overview of change

3. Reduced Thermal Bridging – Reduced thermal bridging strategies are not mandatory. However, the following details must be accurately assessed per ANSI / RESNET / ICC 301. [15]				
3.1 Insulated ceilings assessed at the attic edge for variance in R-value and install quality.	☐	-	☐	☐
3.2 Insulation assessed beneath attic platforms and walkways for variance in R-value and install quality.	☐	-	☐	☐
3.3 Attic access panels, drop-down stairs, & whole-house fans assessed for insulated covers.	☐	-	☐	☐
3.4 Above-grade walls separating conditioned from unconditioned space assessed for advanced framing.	☐	-	☐	☐
3.5 Slabs on grade assessed for insulation where walls separate conditioned from unconditioned space.	☐	-	☐	☐

Not eligible to be builder verified.

Overview of change

4. Air Sealing		
4.1 Rater has verified each air sealing detail below. In addition, the home must meet Item 4.2. Unless otherwise noted below, "sealed" indicates the use of caulk, foam, or equivalent material.		
4.1.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	≤ 5 penetrations ☐
4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-
4.1.3 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed.	☐	No Limit ☐
4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces. Drywall adhesive (but not other construction adhesives) is permitted to be used.	☐	No Limit ☐
4.1.5 Rough opening around windows & exterior doors is sealed.	☐	-
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-
4.1.7 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions are made substantially air-tight with weatherstripping or equivalent gasket.	☐	-
4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor.	☐	No Limit ☐
4.1.9 In townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries.	☐	No Limit ☐

The builder may fully verify the item.

Up to five penetrations may be builder verified.

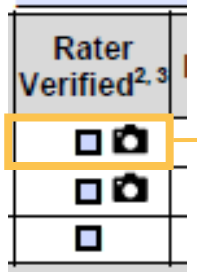
#4 of 5. National Rater Field Checklist: **Raters required to capture photos covering key requirements**

Background

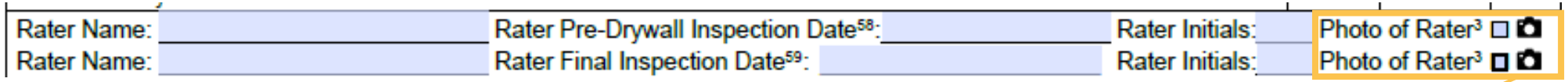
- Prior to Rev. 14, Raters were required to take photos of certain Minimum Rated Features, per ANSI / RESNET / ICC 301, but no photos were required of ENERGY STAR-specific program requirements.

Overview of Change

- Rev. 14 requires that Raters capture photos covering 10 key checklist items, plus a Rater "selfie" photo at each inspection.



A camera icon has been added next to the "Rater Verified" checkbox to indicate which photos are required, both for ENERGY STAR and for Std. 301.



Also, a checkbox with the caption "Photo of Rater" has been added next to each inspection date / signature row to indicate the requirement for a "selfie" photo at each inspection

Overview of Change

Five air barrier details

2.1 Dropped ceilings / soffits below unconditioned attics, and all other ceilings.	☐	≤ 50 sq. ft. ☐	☐ 📷
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	≤ 50 sq. ft. ☐	☐ 📷
2.3 Attic knee walls and skylight shaft walls. [11]	☐	≤ 50 sq. ft. ☐	☐ 📷
2.4 Walls adjoining porch roofs or garages.	☐	≤ 50 sq. ft. ☐	☐ 📷
2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.	☐	≤ 50 sq. ft. ☐	☐ 📷

Two air sealing details

4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-	☐ 📷
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-	☐ 📷

Bedroom pressure balancing

6.2 Bedrooms pressure-balanced (e.g., using transfer grilles, jump ducts, dedicated return ducts, undercut doors) to achieve a Rater-measured pressure differential ≥ -3 Pa and ≤ +3 Pa with respect to the main body of the house when all air handlers are operating. Test configuration and an alternative compliance option in Footnote 25. [25]	☐	☐ 📷

Kitchen & bath exhaust

Location		Continuous Rate	Intermittent Rate [46]		
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume [47, 48]	≥ 100 CFM and, if not integrated with range, also ≥ 5 ACH based on kitchen volume [47, 48, 49]	☐	☐ 📷
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones		
8.2 Bathroom	Airflow	≥ 20 CFM	≥ 50 CFM	☐	☐ 📷
	Sound	Required: ≤ 1 sone	Recommended: ≤ 3 sones		

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#5 of 5. Water Management System: **Sunset the Water Management System Builder Requirements**

Background

- Prior to Rev. 14, builders were required to complete the Water Management System (WMS) Builder Requirements, a one-page list of commonsense details to improve the durability of homes.
- While valuable, these details are not verified by the Rater.

Overview of change

- Water Management System Builder Requirements have been sunset with Rev. 14.
- This will improve the program's quality control by significantly reducing the number of requirements that are not third-party verified.
- WMS will be archived and available to builders or other entities, such as utilities, which may choose to continue implementing them.
- Additional guidance on these details remains available in the Building America Solutions Center.
- Water management requirements will continue to be maintained and enhanced as part of the EPA's Indoor AirPLUS program.

Non-Change: Track B – HVAC Credential **May Still be Used**

Background

- Program currently has two compliance tracks for completing HVAC design and commissioning requirements:
  - Track A: HVAC Grading
  - Track B: HVAC Credential
- Track B was proposed to be sunset for homes permitted on or after 1/1/2026.
- Based on partner feedback, this change will not be made.
- The EPA will continue to build capacity to use Track A and may consider more incremental steps to prepare for the eventual sunset of Track B.

Five smaller changes, clarifications, and refinements

#1 of 5-Part A. Rater Design Review Checklist
Narrow scope of Item 2.1 to address only SHGC & Remove SHGC requirement for CZ 4C & 5

Rev. 13

2.1 Specified fenestration meets or exceeds 2009 IECC or, for National v3.2, 2021 IECC requirements. [6, 7]

Rev. 14

2.2	In CZ 1-3, 4A, and 4B, specified windows, skylights, and doors that are ≥ 50% glazed achieve the following: [6, 8]	
	For all Versions except those noted below:	Area-weighted average SHGC ≤ 2009 IECC Table 402.1.1
	For National Version 3.2:	Area-weighted average SHGC ≤ 2021 IECC Table 402.1.2
	For National Version 3.3:	Area-weighted average SHGC ≤ 2024 IECC Table 402.1.2

Item 2.1 becomes Item 2.2

SHGC requirement removed from CZ 4C & 5

Scope narrowed to SHGC only; Reqs. added for National v3.3.

- Item 2.1 becomes Item 2.2 in Revision 14.
- The scope is narrowed to SHGC only and expanded to incorporate National v3.3. Fenestration U-factor is still considered as part of the thermal backstop.
- The SHGC requirements are removed for CZ 4C & 5 (only impacts National v3.2). Note that there were no SHGC requirements in CZ 6-8.

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#1 of 5-Part B. Rater Design Review Checklist
Item 3.1 becomes Item 2.1

Item 3.1 becomes Item 2.1

Rev. 13

3.1 Specified total building thermal envelope UA achieves ≤ 100% of the total UA resulting from the U-factors in 2009 IECC Table 402.1.3 or, for National v3.2, 2021 IECC Table 402.1.2. See exception in Fn. 8. [7,8,9,10]	

Rev. 14

2.1	Specified total building thermal envelope achieves the following: [6, 7, 8, 9]	
	For all Versions except those noted below:	≤ 100% of the total UA per 2009 IECC Table 402.1.3
	For National Version 3.2:	≤ 100% of the total UA per 2021 IECC Table 402.1.2
	For National Version 3.3:	In CZ 1-2: ≤ 108% of the total TC per 2024 IECC Table 402.1.2 In CZ 3-8: ≤ 115% of the total TC per 2024 IECC Table 402.1.2

Reqs. added for National v3.3.

- Item 3.1 becomes Item 2.1 in Revision 14.
- Requirements added for National v3.3.
- Fenestration U-factor is still considered as part of the total building thermal envelope.

#2 of 5. Applicable Program Reqs., Versions, & Revs. by Location
Applicable permit date is tied to permit that governs efficiency features

- In cases where multiple permits are issued, the 'permit date' is the one on which the permit authorizing construction of the building, including the building features affecting energy use, was issued.

ENERGY STAR Single-Family New Homes
Applicable Program Requirements, Versions, and Revisions
by Location (Rev. 14)

This document, available at www.energystar.gov/newhomesrequirements, is designed to be used in conjunction with the Single-Family New Homes (SFNH) national and regional program requirements documents. Use Exhibit 1 or, for California, Exhibit 2 to determine the applicable SFNH program requirements, including the minimum Version and Revision, to which a home is eligible to be certified. For information about the minimum program versions eligible to satisfy the Section 45L New Energy Efficient Home Credit, visit www.energystar.gov/taxcredits.

A home may only be certified to the SFNH program requirements applicable to the location of the home, as listed in the Exhibits below. For locations where both national and regional program requirements have been listed, a home may be certified to either one.

Where the EPA has defined a newer Version and / or Revision of the same ENERGY STAR program requirements, homes are eligible to be certified to the new Version / Revision. For example, if a home is eligible to be certified to Version 3.1 of the SFNH National Program Requirements, then it is also eligible to be certified to Version 3.2 of the SFNH National Program Requirements.

Exhibit 1 and 2 contain all Versions and Revisions eligible for use for homes permitted on or after January 1, 2023. Program requirements applicable prior to this date can be found in the Archives.

Exhibit 1: Applicable ENERGY STAR SFNH Program Requirements, Versions, and Revisions for All Locations Except California

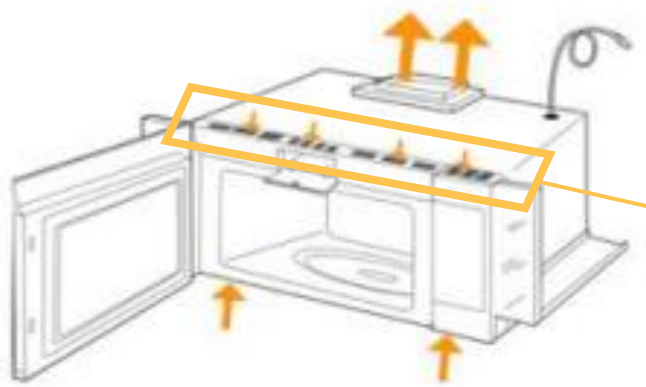
Home Is Built in This State Or Territory:	Home Is Permitted [1, 2] On or After This Date:	For Homes Meeting the Adjacent Criteria, These Are the Applicable Program Requirements, Including Minimum Version ("v") & Revision ("Rev.")	
AL, AK, AZ, AR, CO, IN, ID, KS, KY, LA, MS, MO, NH, NC, ND, OH, OK, SC, SD, TN, WV, WI, WY	01-01-2023	SFNH National v3.1	Rev. 11
	01-01-2024	SFNH National v3.1	Rev. 12
	01-01-2025	SFNH National v3.1	Rev. 13
	01-01-2026	SFNH National v3.1	Rev. 14

1. The 'permit date' is the date on which the permit authorizing construction of the building was issued. In cases where multiple permits are issued for a project (e.g., footing permits, building permits), the 'permit date' is the date on which the permit authorizing construction of the building, including the building features affecting energy use (e.g., insulation levels, window U/SHGC specifications, mechanical equipment efficiency), was issued. Alternatively, the date of the Rater's first site visit or the date of the contract on the home is allowed to be used as the 'permit date'. The permit application date is not allowed to be used.

#3 of 5. National Rater Field Checklist
Sealing top vents of microwave exhaust fan when measuring airflow

- To encourage and facilitate the measurement of microwave-integrated exhaust fan airflow, Raters are permitted to tape off all air inlets except at the bottom.
- No correction factors shall be applied to the measured airflow to account for the increased airflow restriction caused by the tape.

~~48.~~35. The Dwelling Unit Mechanical Ventilation System air flows and local exhaust air flows shall be determined and documented by a Rater using ANSI / RESNET / ICC 380 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the schedule defined by the HCO that the home is being certified under. To facilitate testing the air flow of a microwave-integrated exhaust fan, Raters are permitted to tape off all air inlets except at the bottom. However, no correction factors shall be applied to the measured air flow to account for the increased airflow restriction. Designers are permitted to provide multiple combinations of a design ventilation airflow rate, run-



Top inlets can be sealed during testing.

#4 of 5. National Program Requirements
Exhibit 1, and language preceding it, updated for clarity

Rev. 13 Exhibit 1 Layout

Hot and Mixed Climates (2021 IECC Zones 1,2,3,4A,4B) [11]	Cold Climates (2021 IECC Zones 4C,5,6,7,8) [11]
Cooling Equipment (Where Provided)	
• Cooling equipment modeled at the applicable efficiency levels below:	
○ ENERGY STAR AC: 16 SEER ○ Heat pump (See Heating Equipment)	○ AC: 14 SEER ○ Heat pump (See Heating Equipment)
• Installation quality modeled at -20% blower fan airflow deviation, 0.52 W / CFM blower fan efficiency, and Grade III refrigerant charge	
Heating Equipment	
• Heating equipment modeled at the applicable efficiency levels below, dependent on fuel and system type:	
○ Gas furnace: CZ 1-3: 80 AFUE; CZ 4A & 4B: 90 AFUE [11] ○ Gas boiler: CZ 1-3: 80 AFUE; CZ 4A & 4B: 90 AFUE [11] ○ ENERGY STAR air-source heat pump: 9.2 HSPF / 16 SEER	○ ENERGY STAR gas furnace: 95 AFUE ○ ENERGY STAR gas boiler: 95 AFUE ○ ENERGY STAR air-source heat pump: 9.2 HSPF / 16 SEER
• Installation quality modeled at -20% blower fan airflow deviation; 0.52 W / CFM blower fan efficiency; and, as applicable, Grade III refrigerant charge	
Envelope, Windows, & Doors	
• Insulation levels modeled to 2021 IECC levels and Grade I installation per ANSI / RESNET / ICC 301 • Infiltration rate modeled at 3 ACH50 • ENERGY STAR windows and doors modeled, as illustrated below:	

Climate Zone: [11]	1 - 2	3	4A & 4B	4C - 8
Window U-Value:	0.40	0.30	0.30	0.27
Window SHGC:	0.25	0.25	0.30	0.30

Door Type:	Opaque	≤½ Lite	>½ Lite	
Climate Zone: [11]	All	All	1 - 3	4 - 8
Door U-Value:	0.17	0.25	0.30	0.30
Door SHGC:	Any	0.25	0.25	0.40

Water Heater	
• DHW equipment modeled at the following applicable efficiency levels, dependent on fuel type: Gas: 0.90 UEF; Electric: 2.20 UEF	
Thermostat & Ductwork	
• Programmable thermostat modeled • All ducts and air handlers modeled within conditioned space, uninsulated, with no leakage to the outside	
Lighting & Appliances	
• ENERGY STAR refrigerators, dishwashers, and ceiling fans modeled • ENERGY STAR light bulbs modeled with Tier 2 efficiency in 100% of Qualifying Light Fixture Locations, as defined by ANSI / RESNET / ICC 301	

Rev. 14 Exhibit 1 Layout

Climate Zone Type	Hot and Mixed Climates				Cold Climates				
2021 IECC Climate Zone [11]	1	2	3	4	4C	5	6	7	8
Thermal Enclosure									
Ceiling, Wall, & Floor Insulation Grade	I								
Ceiling Insulation	R-30	R-49	R-49	R-60	R-60	R-60	R-60	R-60	R-60
Wall Insulation: Cavity + Continuous	R-13	R-13	R-20	R-20 + R-5	R-20 + R-5	R-20 + R-5	R-20 + R-5	R-20 + R-5	R-20 + R-5
Frame Floor Insulation	R-13	R-13	R-19	R-19	R-30	R-30	R-30	R-38	R-38
Slab Insulation & Depth	None	None	R-10 2ft	R-10 4ft	R-10 4ft	R-10 4ft	R-10 4ft	R-10 4ft	R-10 4ft
Window U-Factor	0.40	0.40	0.30	0.30	0.27	0.27	0.27	0.27	0.27
Window SHGC	0.25	0.25	0.25	0.30	0.30	0.30	0.30	0.30	0.30
Door (U-Factor / SHGC)	Opaque: U-Factor: 0.17 / SHGC: Any; ≤½ lite Door: U-Factor: 0.25 / SHGC: 0.25; >½ lite Door: U-Factor: 0.30								
>½ lite Door (SHGC)	0.25	0.25	0.25	0.40	0.40	0.40	0.40	0.40	0.40
Heating and Cooling Systems									
Air Conditioning (SEER2)	15.2	15.2	15.2	15.2	13.3	13.3	13.3	13.3	13.3
Gas Furnace (AFUE)	80	80	80	90	95	95	95	95	95
Gas Boiler (AFUE)	80	80	80	90	95	95	95	95	95
Heat Pump (HSPF2 / SEER2)	7.8 / 15.2								
HVAC Grade	Airflow Grade: II; Watt Draw Efficiency Grade: II; Refrigerant Grade: III								
Thermostat Type	Programmable								
Duct Location, Leakage, & Insulation	Location: 100% Conditioned Space; Leakage to Outside: 0 CFM; Insulation: Not Present								
Infiltration									
Infiltration Rate (ACH50)	3								
Water Heating									
Gas: Efficiency (UEF) & Capacity (Gal.)	0.90 & 0 (Instantaneous)								
Electric: Efficiency (UEF) & Capacity (Gal.)	2.20 & 60								
Lighting & Appliances									
Lighting	100% LED Lighting								
Refrigerators, Dishwashers, Ceiling Fans	Efficiency Equal to ENERGY STAR Product (Labeled product recommended, but not required)								

#5 of 5. National Rater Field Checklist
Time-limited allowance for CMU walls with Grade III in the cores

- A time-limited allowance has been added for CMU block wall assemblies with Grade III insulation filling the cores for homes permitted prior to 01/01/2026.

~~4.~~5. Three~~Two~~ alternatives are provided:

compression caused by the excess insulation; c) CMU block wall assemblies with Grade III insulation filling the cores are permitted to be used in homes permitted prior to 01/01/26, to provide an opportunity for standards bodies to consider a protocol that may allow such assemblies to achieve Grade I.

- Standards bodies are working on new inspection protocols that may allow such assemblies to achieve Grade I.
- If successful, homes permitted after this date with this assembly type will be required to achieve Grade I.
- If not successful, then builders will have to select an alternative insulation strategy that does achieve Grade I.

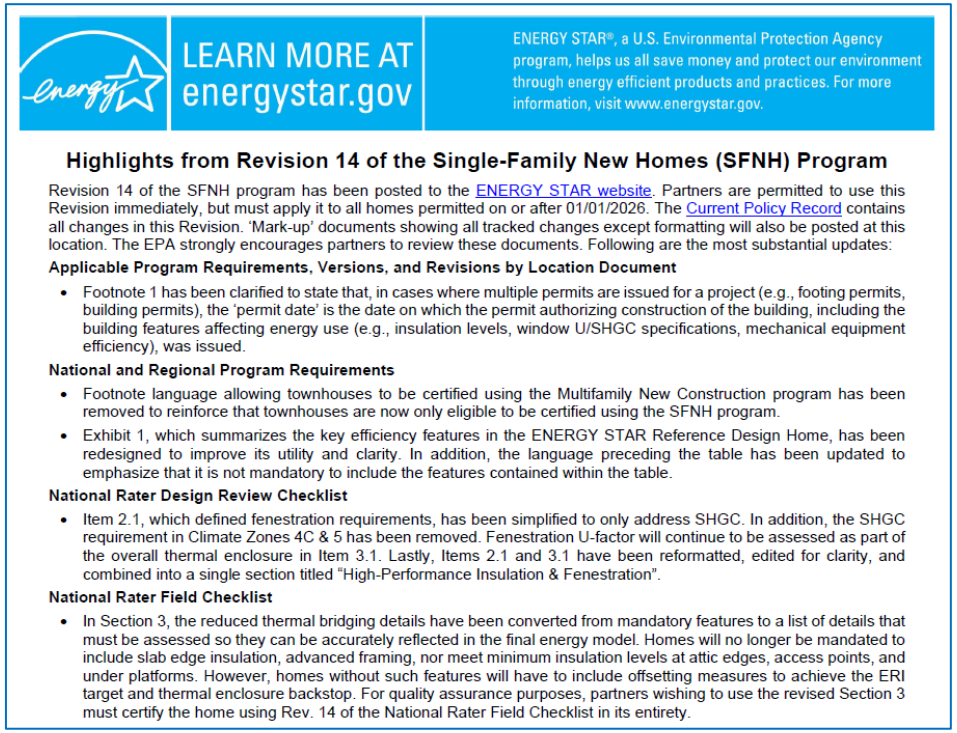
Summary of most notable changes in Rev. 14

- Five big changes:
  1. Eliminated mandatory reduced thermal bridging details
  2. Streamlined air sealing details and added an air leakage backstop
  3. Narrowed the scope of builder-verified items
  4. Raters required to capture photos covering key requirements
  5. Sunset the Water Management System Builder Requirements

- Five smaller changes, clarifications, & refinements:
  1. Adjusted RDRC Item 2.1 & 3.1
  2. Applicable permit date is tied to permit that governs efficiency features
  3. Sealing top vents of microwave exhaust fan when measuring airflow
  4. Updated layout of Exhibit 1 for clarity
  5. Time-limited allowance for CMU walls with Grade III in the cores

Implementation of Revision 14

- Released 01/15/25.
- Updated program documents at: www.energystar.gov/newhomesrequirements.
- One-page highlights document, tracked-changes documents, and updated Policy Record will be available at: www.energystar.gov/newhomespolicyrecord
- Implementation date of 01/01/2026.
  - You can use Rev. 14 for any home.
  - You must use Rev. 14 for any home permitted after 01/01/26.



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Highlights from Revision 14 of the Single-Family New Homes (SFNH) Program

Revision 14 of the SFNH program has been posted to the ENERGY STAR website. Partners are permitted to use this Revision immediately, but must apply it to all homes permitted on or after 01/01/2026. The Current Policy Record contains all changes in this Revision. 'Mark-up' documents showing all tracked changes except formatting will also be posted at this location. The EPA strongly encourages partners to review these documents. Following are the most substantial updates:

Applicable Program Requirements, Versions, and Revisions by Location Document

- Footnote 1 has been clarified to state that, in cases where multiple permits are issued for a project (e.g., footing permits, building permits), the 'permit date' is the date on which the permit authorizing construction of the building, including the building features affecting energy use (e.g., insulation levels, window U/SHGC specifications, mechanical equipment efficiency), was issued.

National and Regional Program Requirements

- Footnote language allowing townhouses to be certified using the Multifamily New Construction program has been removed to reinforce that townhouses are now only eligible to be certified using the SFNH program.
- Exhibit 1, which summarizes the key efficiency features in the ENERGY STAR Reference Design Home, has been redesigned to improve its utility and clarity. In addition, the language preceding the table has been updated to emphasize that it is not mandatory to include the features contained within the table.

National Rater Design Review Checklist

- Item 2.1, which defined fenestration requirements, has been simplified to only address SHGC. In addition, the SHGC requirement in Climate Zones 4C & 5 has been removed. Fenestration U-factor will continue to be assessed as part of the overall thermal enclosure in Item 3.1. Lastly, Items 2.1 and 3.1 have been reformatted, edited for clarity, and combined into a single section titled "High-Performance Insulation & Fenestration".

National Rater Field Checklist

- In Section 3, the reduced thermal bridging details have been converted from mandatory features to a list of details that must be assessed so they can be accurately reflected in the final energy model. Homes will no longer be mandated to include slab edge insulation, advanced framing, nor meet minimum insulation levels at attic edges, access points, and under platforms. However, homes without such features will have to include offsetting measures to achieve the ERI target and thermal enclosure backstop. For quality assurance purposes, partners wishing to use the revised Section 3 must certify the home using Rev. 14 of the National Rater Field Checklist in its entirety.

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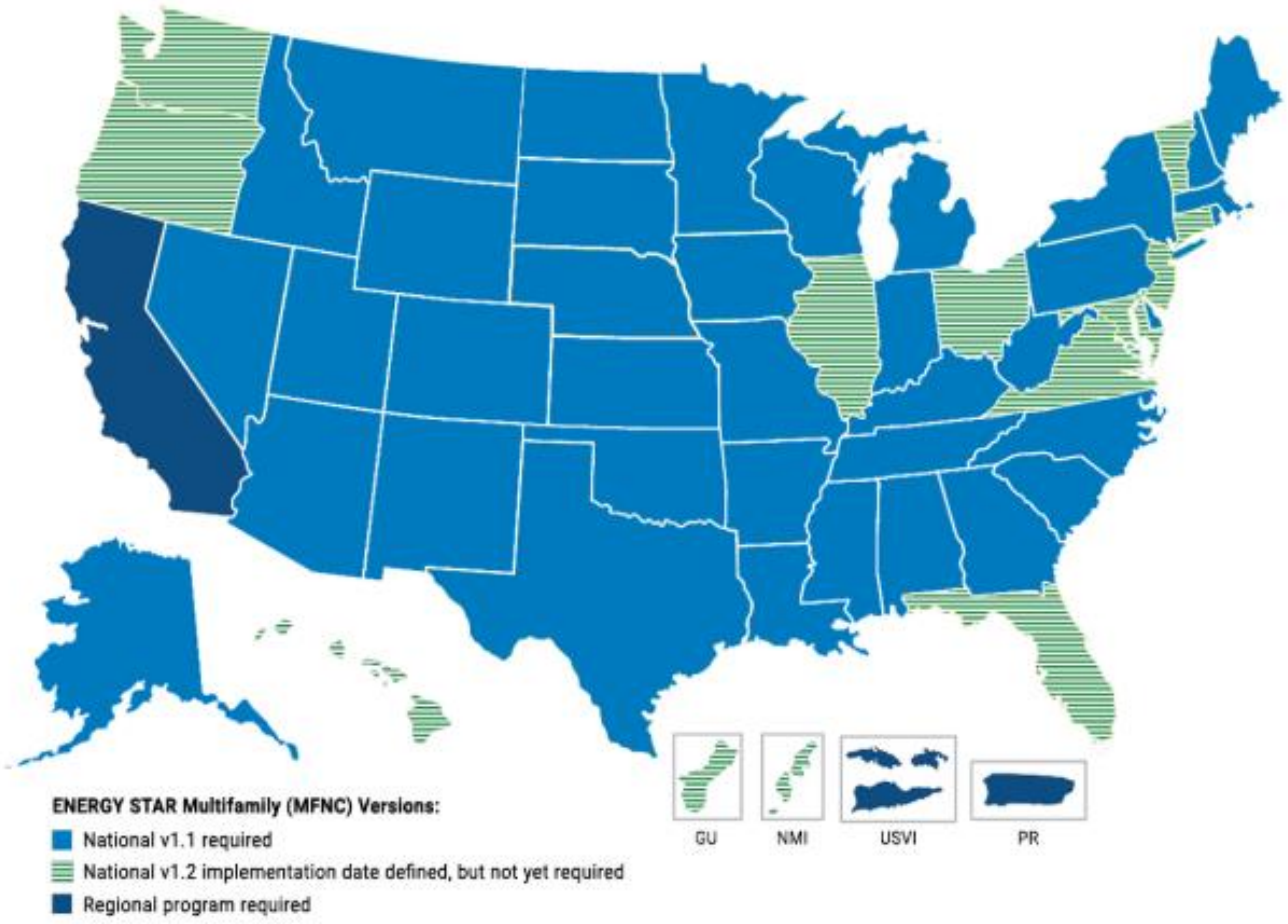
Multifamily New Construction (MFNC)

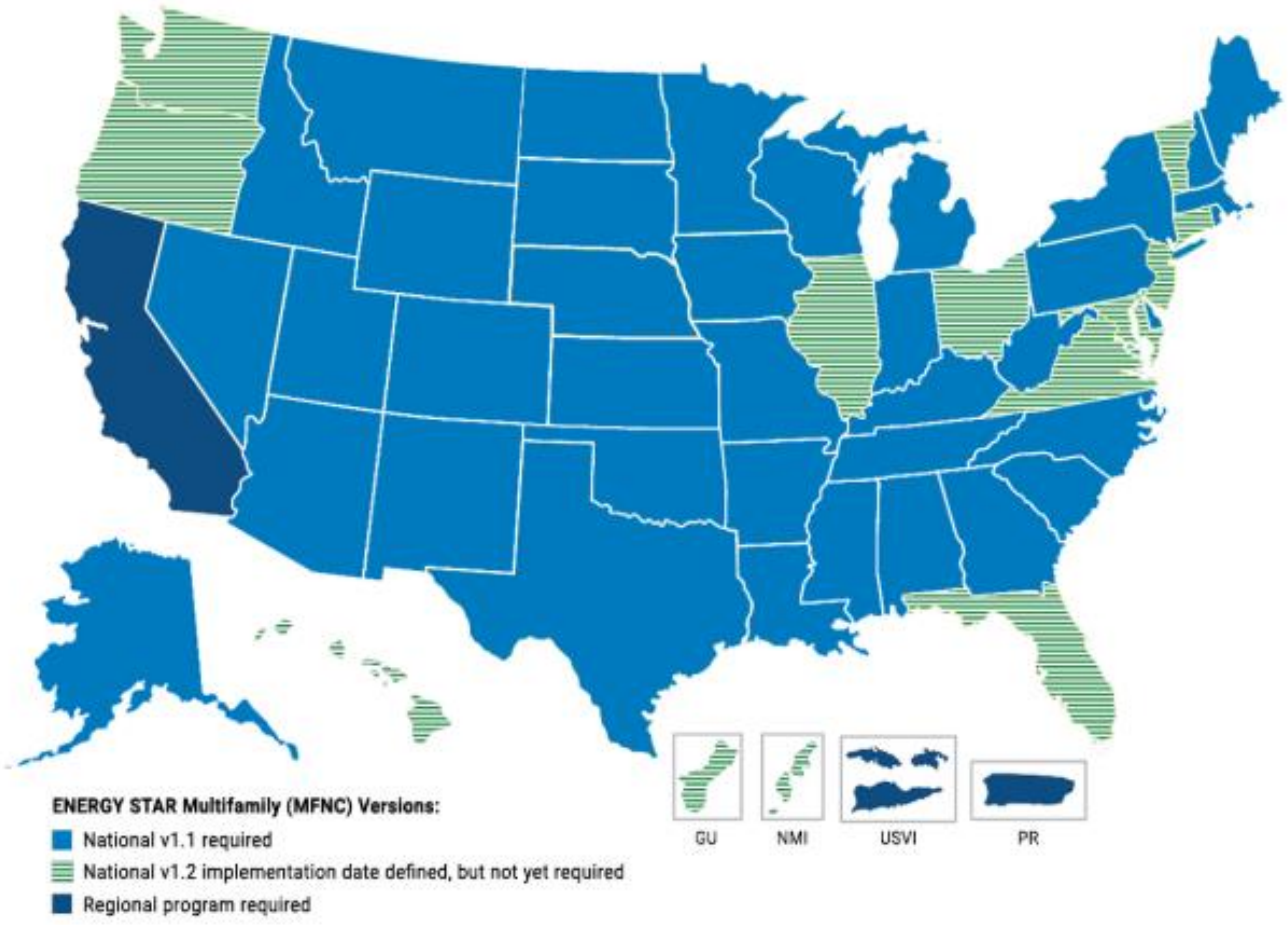
Current MFNC Program Versions

National Version 1.1



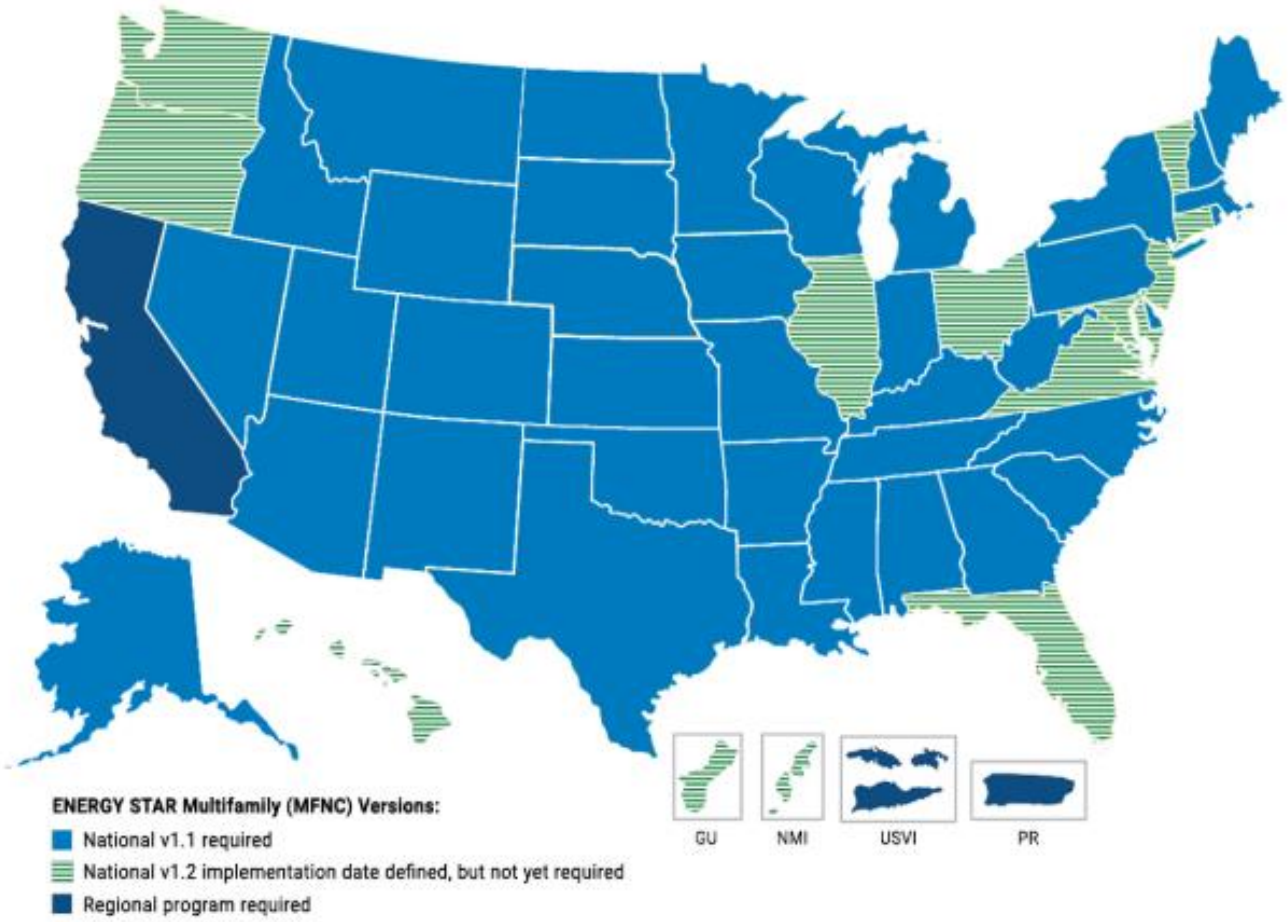
- Now required for certification in most states.
- Performance target:
  - ERI Path: ERI Target of ~55-65.
  - ASHRAE Path: 15% savings over ASHRAE 90.1-2016
  - Prescriptive Path: Prescriptive Measures
- In addition to the performance target, there are mandatory requirements that lock in key features related to comfort, air quality, and durability.

National Version 1.2



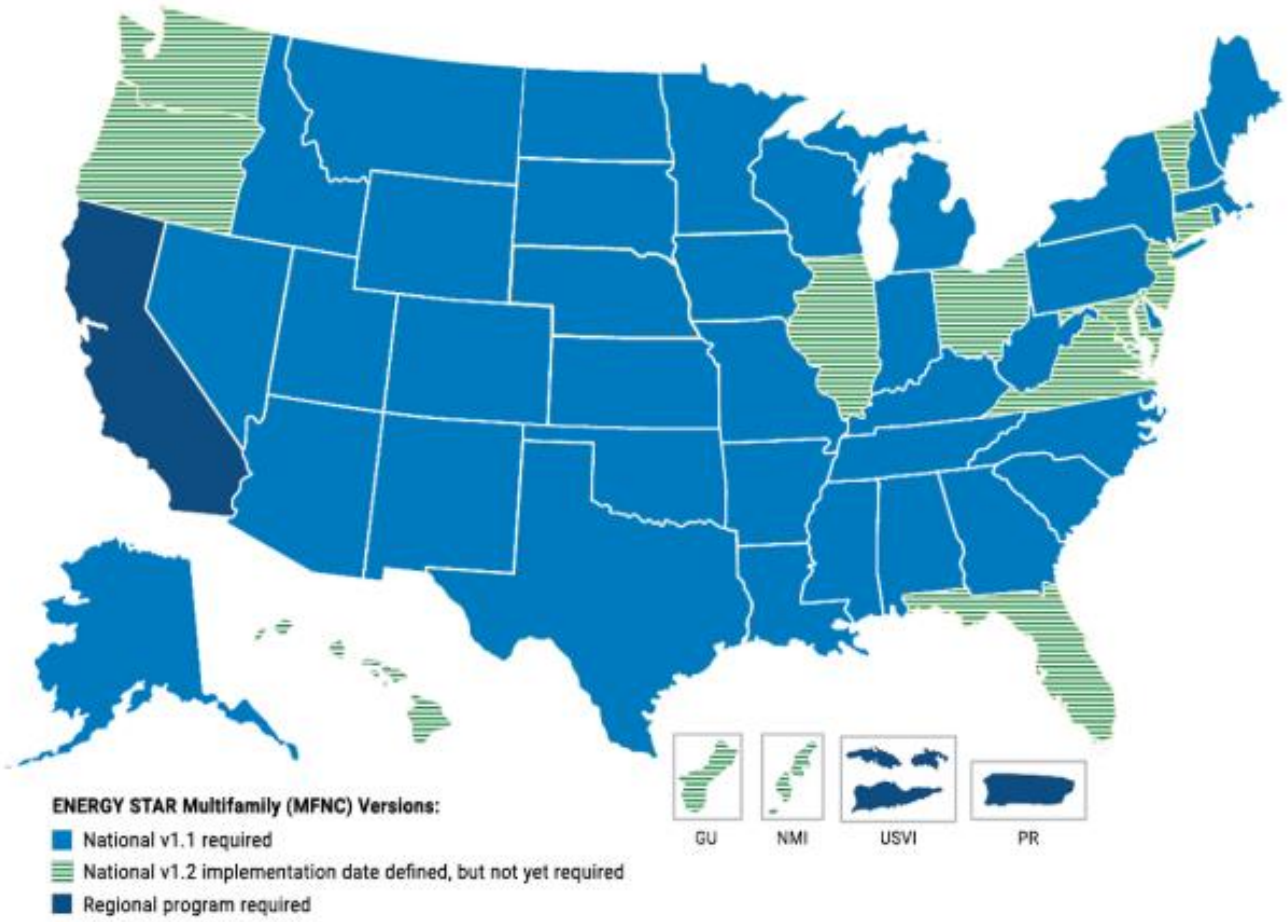
- Will be required for certification for permits on or after 01/01/2027 in: CT, FL, GU, HI, IL, MD, NMI, NJ, OH, OR, VA, VT, WA
- Performance target:
  - ERI Path: ERI Target of ~45-55.
  - ASHRAE Path: 15% savings over ASHRAE 90.1-2019
  - Prescriptive Path: Prescriptive Measures
- Same mandatory requirements as National Version 1.1, except for more stringent thermal backstop.

National Version 1.3



- Will not be required for certification before 01/01/2029.
  - But is allowed to be used before then.
- Performance target:
  - ERI Path: ERI Target of ~40-50.
  - ASHRAE Path: 15% savings over ASHRAE 90.1-2022
  - Prescriptive Path: Prescriptive Measures
- Same mandatory requirements as National Version 1.2, except for a more flexible thermal backstop.

Regional Requirements



- OR-WA v1.2 sunset for permits on or after 01/01/2027.
- CA v1.2, v1.3, v1.4, v1.5: dependent on plan approval date, permit date, and edition of state code enforced for the building being certified.
- Caribbean v1 – not anticipating any changes in the year ahead.

Introducing Revision 05

Preview of:
ENERGY STAR: Multifamily New Construction (MFNC) Revision 5
Tuesday 2:30 PM at Joshua Tree – Rebecca Hudson, Gayathri Vijayakumar (SWA)

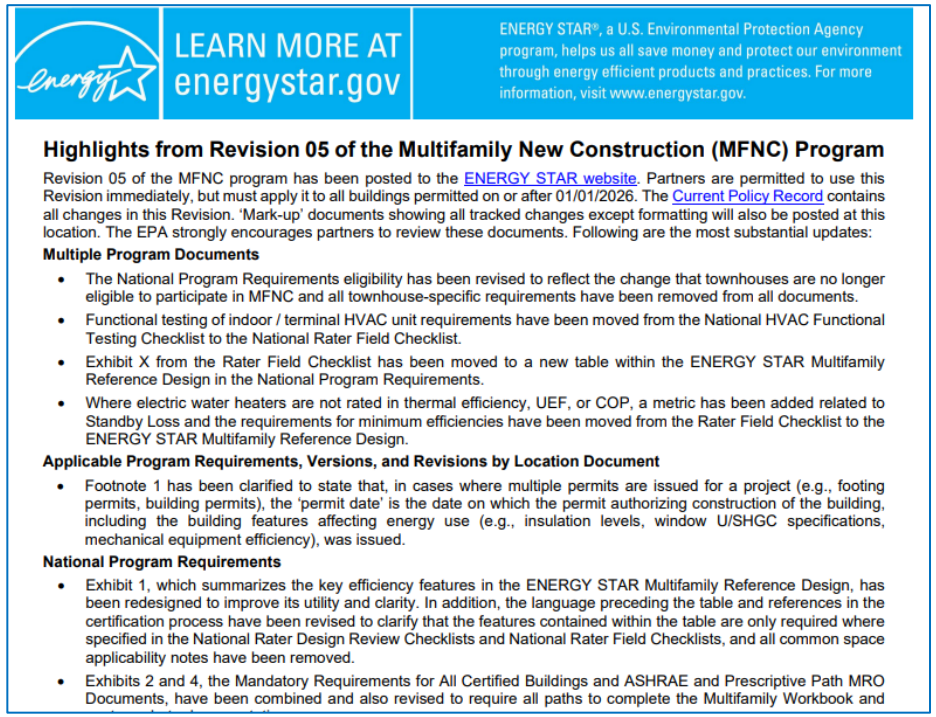
Summary of most notable changes in Rev. 05

- Top ten changes:
  1. Eliminated **some** mandatory reduced thermal bridging requirements
  2. Narrowed the scope of builder-verified items
  3. Require Raters to capture photos, including selfie, for all paths
  4. Sunset the Water Management System Requirements
  5. Limit townhouse eligibility to SFNH
  6. Require Multifamily Workbook for all paths
  7. Consolidated ASHRAE target and documentation
  8. Reduced minimum mass floor insulation required over garage
  9. Added new central exhaust duct leakage test option
  10. Updated VRF Functional testing protocols

- Additional clarifications and refinements, including relocating requirements.

Implementation of Revision 05

- Released 01/15/25.
- Updated program documents at: www.energystar.gov/newhomesrequirements.
- One-page highlights document, tracked-changes documents, and updated Policy Record will be available at: www.energystar.gov/newhomespolicyrecord
- Implementation date of 01/01/2026.
  - You can use Rev. 05 for any building.
  - You must use Rev. 05 for any building permitted after 01/01/26.



LEARN MORE AT energystar.gov

ENERGY STAR®, a U.S. Environmental Protection Agency program, helps us all save money and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov.

Highlights from Revision 05 of the Multifamily New Construction (MFNC) Program

Revision 05 of the MFNC program has been posted to the ENERGY STAR website. Partners are permitted to use this Revision immediately, but must apply it to all buildings permitted on or after 01/01/2026. The Current Policy Record contains all changes in this Revision. 'Mark-up' documents showing all tracked changes except formatting will also be posted at this location. The EPA strongly encourages partners to review these documents. Following are the most substantial updates:

Multiple Program Documents

- The National Program Requirements eligibility has been revised to reflect the change that townhouses are no longer eligible to participate in MFNC and all townhouse-specific requirements have been removed from all documents.
- Functional testing of indoor / terminal HVAC unit requirements have been moved from the National HVAC Functional Testing Checklist to the National Rater Field Checklist.
- Exhibit X from the Rater Field Checklist has been moved to a new table within the ENERGY STAR Multifamily Reference Design in the National Program Requirements.
- Where electric water heaters are not rated in thermal efficiency, UEF, or COP, a metric has been added related to Standby Loss and the requirements for minimum efficiencies have been moved from the Rater Field Checklist to the ENERGY STAR Multifamily Reference Design.

Applicable Program Requirements, Versions, and Revisions by Location Document

- Footnote 1 has been clarified to state that, in cases where multiple permits are issued for a project (e.g., footing permits, building permits), the 'permit date' is the date on which the permit authorizing construction of the building, including the building features affecting energy use (e.g., insulation levels, window U/SHGC specifications, mechanical equipment efficiency), was issued.

National Program Requirements

- Exhibit 1, which summarizes the key efficiency features in the ENERGY STAR Multifamily Reference Design, has been redesigned to improve its utility and clarity. In addition, the language preceding the table and references in the certification process have been revised to clarify that the features contained within the table are only required where specified in the National Rater Design Review Checklists and National Rater Field Checklists, and all common space applicability notes have been removed.
- Exhibits 2 and 4, the Mandatory Requirements for All Certified Buildings and ASHRAE and Prescriptive Path MRO Documents, have been combined and also revised to require all paths to complete the Multifamily Workbook and

ENERGY STAR NextGen™ CERTIFIED HOMES & APARTMENTS

Preview of:

Level up with ENERGY STAR NextGen: Program Updates and Rater Training

Tuesday 4:00 PM at Joshua Tree – Zak Shadid, Dylan Tindall (the BER)

EPA

NextGen Energy Efficiency Specifications

Achievable, market-ready requirements

Energy use
Highly energy-efficient construction

Connected heat pump
Multi-stage ENERGY STAR certified

Connected heat pump water heater
ENERGY STAR certified

Electric cooking
to improve indoor air quality

Electric vehicle
charging capability

NextGen™ CERTIFIED HOMES & APARTMENTS

ENERGY STAR NextGen Early Participation

- ✓ ENERGY STAR NextGen-certified homes: **63**
- ✓ Rating companies: **12**
- ✓ Builders: **20**
- ✓ Utilities: **19**
- ✓ Average ERI score: **23** (with PV)

ENERGY STAR NextGen™ CERTIFIED HOMES & APARTMENTS

Quality Control Updates

Preview of:

Now in Effect: ENERGY STAR's Enhanced Inspection and Quality Control Protocols

Monday 2:30 PM at Joshua Tree – Elliot Seibert, Scott Doyle (RESNET)

ENERGY STAR QAQC Enhancements

- After high-level requirements were finalized in July, 2024, HCOs (including RESNET) are implementing enhancements to the inspection and certification workflow, with more to come in the future.
- Highlights for 2025:
  - 1-hour annual training module: “ENERGY STAR Year Ahead” (Optional in 2025).
  - RESNET staff will be performing direct QC file review on fraction of ratings.
  - Raters are to begin capturing a new list of on-site photos for Revision 14/05.

https://www.energystar.gov/partner-resources/residential_new/program_reqs/program_reqs_archives#certification

On-Site Photo Collection

The Revision 14/05 National Rater Field Checklist introduces a list of photos that Raters are required to capture at each inspection, including:

- **1** geo-tagged and time-stamped Rater "selfie" per inspection.
- **10** photos reinforcing existing ANSI / RESNET 301 and MINHERS lists.
- **8** additional photos of ENERGY STAR-specific checklist measures

See applicable National Rater Field Checklist at energystar.gov/newhomesrequirements

ENERGY STAR

ENERGY STAR Single-Family New Homes
National Rater Field Checklist, Version 3.1 / 3.2 / 3.3 (Rev. 14)

Home Address: _____ City: _____ State: _____ Permit Date: _____

Thermal Enclosure System **1. High-Performance Insulation & Fenestration**	Must Correct	Builder Verified [1]	Rater Verified [2, 3]	N/A [4]
1.1 Insulation meets specifications in National Rater Design Review Checklist Item 2.1.	☐	Pre-rock+50 ☐	☐ 📷	-
1.2 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 5. [5, 6]	☐	Pre-rock+50 ☐	☐ 📷	-
1.3 Fenestration meets specifications in National Rater Design Review Checklist Items 2.1 & 2.2.	☐	-	☐	-
2. Fully-Aligned Air Barriers [7] - At each insulated location below, a complete air barrier is provided that is fully aligned as follows:				
Ceilings: At interior or exterior horizontal surface of ceiling insulation in Climate Zones 1-3; at interior horizontal surface of ceiling insulation in Climate Zones 4-8. Also, at exterior vertical surface of ceiling insulation in all climate zones (e.g., using a wind baffle that extends to the full height of the insulation in every bay or a tabbed baffle in each bay with a soffit vent that prevents wind washing in adjacent bays). [8, 9]				
2.1 Dropped ceilings / soffits below unconditioned attics, and all other ceilings.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
Walls: At exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in Climate Zones 4-8. [9, 10]				
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.3 Attic knee walls and skylight shaft walls. [11]	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.4 Walls adjoining porch roofs or garages.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.5 Double-walls and all other exterior walls.	☐	≤ 50 sq. ft. ☐	☐	-
Floors: At exterior vertical surface of floor insulation in all climate zones and, if over unconditioned space, also at interior horizontal surface including supports to ensure alignment. Alternatives in Footnotes 13 & 14. [12, 13, 14]				
2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.7 All other floors adjoining unconditioned space (e.g., rim / band joists at exterior wall or at porch roof).	☐	≤ 50 sq. ft. ☐	☐	☐
3. Reduced Thermal Bridging – Reduced thermal bridging strategies are not mandatory. However, the following details must be accurately assessed per ANSI / RESNET / ICC 301. [15]				
3.1 Insulated ceilings assessed at the attic edge for variance in R-value and install quality.	☐	-	☐	☐
3.2 Insulation assessed beneath attic platforms and walkways for variance in R-value and install quality.	☐	-	☐	☐
3.3 Attic access panels, drop-down stairs, & whole-house fans assessed for insulated covers.	☐	-	☐	☐
3.4 Above-grade walls separating conditioned from unconditioned space assessed for advanced framing.	☐	-	☐	☐
3.5 Slabs on grade assessed for insulation where walls separate conditioned from unconditioned space.	☐	-	☐	☐
4. Air Sealing				
4.1 Rater has verified each air sealing detail below. In addition, the home must meet Item 4.2. Unless otherwise noted below, "sealed" indicates the use of caulk, foam, or equivalent material.				
4.1.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	≤ 5 penetrations ☐	☐	-
4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-	☐ 📷	☐
4.1.3 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed.	☐	No Limit ☐	☐	☐
4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces. Drywall adhesive (but not other construction adhesives) is permitted to be used.	☐	No Limit ☐	☐	☐
4.1.5 Rough opening around windows & exterior doors is sealed.	☐	-	☐	-
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-	☐ 📷	☐
4.1.7 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions are made substantially air-tight with weatherstripping or equivalent gasket.	☐	-	☐	☐
4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor.	☐	No Limit ☐	☐	☐
4.1.9 In townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries.	☐	No Limit ☐	☐	☐
4.2 Rater-measured air leakage of Dwelling or Dwelling Unit meets one of the following: [16]				
4.2.1 For all Versions except those noted below: ≤ 4.5 ACH50 For National v3.2 and CA v3.4: ≤ 4.0 ACH50 (see exception in Fn. 17) [17] For National v3.3 and CA v3.5: ≤ 3.5 ACH50 (see exception in Fn. 17) [17]	☐	-	☐ 📷	☐
4.2.2 As an alternative, for a Dwelling with ≤ 1,500 sq. ft. of Conditioned Floor Area, a Townhouse, or an attached Dwelling Unit, air leakage is ≤ 0.30 CFM50 per sq ft. of Dwelling Unit Compartmentalization Boundary area.	☐	-	☐ 📷	☐

ENERGY STAR Single-Family New Homes
National Rater Field Checklist, Version 3.1 / 3.2 / 3.3 (Rev. 14)

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1.2 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 5. [5, 6]	☐	Pre-rock+50 ☐	☐ 📷	-
1.3 Fenestration meets specifications in National Rater Design Review Checklist Items 2.1 & 2.2.	☐	-	☐	-
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2.1 Dropped ceilings / soffits below unconditioned attics, and all other ceilings.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
Walls: At exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in Climate Zones 4-8. [9, 10]				
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
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2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
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3.3 Attic access panels, drop-down stairs, & whole-house fans assessed for insulated covers.	☐	-	☐	☐
3.4 Above-grade walls separating conditioned from unconditioned space assessed for advanced framing.	☐	-	☐	☐
3.5 Slabs on grade assessed for insulation where walls separate conditioned from unconditioned space.	☐	-	☐	☐
4. Air Sealing				
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4.1.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	≤ 5 penetrations ☐	☐	-
4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-	☐ 📷	☐
4.1.3 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed.	☐	No Limit ☐	☐	☐
4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces. Drywall adhesive (but not other construction adhesives) is permitted to be used.	☐	No Limit ☐	☐	☐
4.1.5 Rough opening around windows & exterior doors is sealed.	☐	-	☐	-
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-	☐ 📷	☐
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4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor.	☐	No Limit ☐	☐	☐
4.1.9 In townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries.	☐	No Limit ☐	☐	☐
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4.2.1 For all Versions except those noted below: ≤ 4.5 ACH50 For National v3.2 and CA v3.4: ≤ 4.0 ACH50 (see exception in Fn. 17) [17] For National v3.3 and CA v3.5: ≤ 3.5 ACH50 (see exception in Fn. 17) [17]	☐	-	☐ 📷	☐
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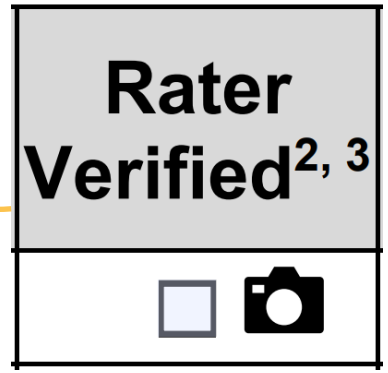

For each item with a camera icon, capture one representative photo of the strategy installed.

ENERGY STAR Single-Family New Homes
National Rater Field Checklist, Version 3.1 / 3.2 / 3.3 (Rev. 14)

HVAC System [18]				Must Correct	Rater Verified[2, 3]	N/A [4]
5. Heating & Cooling Equipment - Complete Track A - HVAC Grading [19] or Track B - HVAC Credential [20]						
Track A	5a.1 Blower fan volumetric airflow is Grade I or II per ANSI / RESNET / ACCA / ICC 310.			☐	☐ 📷	☐
	5a.2 Blower fan watt draw is Grade I or II per ANSI / RESNET / ACCA / ICC 310.			☐	☐	☐
	5a.3 Refrigerant charge is Grade I per ANSI / RESNET / ACCA / ICC 310. See Footnote 21 for exemptions. [21]			☐	☐	☐
Track B	5b.1 HVAC manufacturer & model number on installed equipment matches either of the following (check box):[22] ☐ National HVAC Design Report ☐ Written approval received from designer			☐	☐ 📷	☐
	5b.2 External static pressure measured by Rater at contractor-provided test locations and documented below:[23] Return-Side External Static Pressure: _____IWC Supply-Side External Static Pressure: _____IWC			☐	☐	☐
	5b.3 Permitted, but not required: National HVAC Commissioning Checklist collected, with no items left blank.			☐	☐	☐
6. Duct Quality Installation (Applies to Heating, Cooling, Ventilation, Exhaust, & Pressure Balancing Ducts, Unless Noted in Footnote)						
6.1 Ductwork installed without kinks, sharp bends, compressions, or excessive coiled flexible ductwork. [24]				☐	☐	☐
6.2 Bedrooms pressure-balanced (e.g., using transfer grilles, jump ducts, dedicated return ducts, undercut doors) to achieve a Rater-measured pressure differential ≥ -3 Pa and ≤ +3 Pa with respect to the main body of the house when all air handlers are operating. Test configuration and an alternative compliance option in Footnote 25. [25]				☐	☐ 📷	-
6.3 All supply and return ducts in unconditioned space, including connections to trunk ducts, are insulated to ≥ R-6. [26]				☐	☐	☐
6.4 Rater-measured total duct leakage meets one of the following two options. Alternative in Footnote 28: [27, 28, 29]						
6.4.1 Rough-in: The greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25, with air handler & all ducts, building cavities used as ducts, & duct boots installed. All duct boots sealed to finished surface, Rater-verified at final. [30]				☐	☐ 📷	☐
6.4.2 Final: The greater of ≤ 8 CFM25 per 100 sq. ft. of CFA or ≤ 80 CFM25, with the air handler & all ducts, building cavities used as ducts, duct boots, & register grilles atop the finished surface (e.g., drywall, floor) installed. [31]				☐	☐ 📷	☐
6.5 Rater-measured duct leakage to outdoors the greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25. [27, 32]				☐	☐ 📷	☐
7. Dwelling Unit Mechanical Ventilation Systems ("Vent System") [33] & Inlets in Return Duct [34]						
7.1 Rater-measured ventilation rate is within either ± 15 CFM or ±15% of design report value. [35]				☐	☐ 📷	-
7.2 A readily-accessible ventilation override control installed and also labeled if its function is not obvious (e.g., a label is required for a toggle wall switch, but not for a switch that's on the ventilation equipment). [36]				☐	☐	-
7.3 For any outdoor air inlet connected to a ducted return of the HVAC system (Complete if present; otherwise check "N/A"): [34]						☐
7.3.1 Controls automatically restrict airflow using a motorized damper during vent. off-cycle and occupant override. [37]				☐	☐	-
7.3.2 Rater-measured vent. rate is ≤ 15 CFM or 15% above design value at highest HVAC fan speed. Alt. in Fn. 38. [38]				☐	☐	-
7.4 System fan rated ≤ 3 sones if intermittent and ≤ 1 sone if continuous, or exempted. [39]				☐	☐	-
7.5 If Vent System controller operates the HVAC fan, then HVAC fan operation is intermittent and either the fan type is ECM / ICM or the controls will reduce the run-time by accounting for HVAC system heating or cooling hours. [40]				☐	☐	☐
7.6 Bathroom fans are ENERGY STAR certified if used as part of the Vent System. [41]				☐	☐	☐
7.7 Air inlet location (Complete if ventilation air inlet location was specified on design report; otherwise check "N/A"): [42, 43]						☐
7.7.1 Inlet pulls ventilation air directly from outdoors and not from attic, crawlspace, garage, or adjacent dwelling unit.				☐	☐	-
7.7.2 Inlet is ≥ 2 ft. above grade or roof deck; ≥ 10 ft. of stretched-string distance from known contamination sources not exiting the roof, and ≥ 3 ft. distance from dryer exhausts and sources exiting the roof. [44]				☐	☐	-
7.7.3 Inlet is provided with rodent / insect screen with ≤ 0.5 in. mesh.				☐	☐	-
8. Local Mechanical Exhaust – In each kitchen and bathroom, a system is installed that exhausts directly to the outdoors and meets one of the following Rater-measured airflow and manufacturer-rated sound level standards: [35, 45]						
Location		**Continuous Rate**	**Intermittent Rate** [46]			
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume [47, 48]	≥ 100 CFM and, if not integrated with range, also ≥ 5 ACH based on kitchen volume [47, 48, 49]	☐	☐ 📷	-
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones			
8.2 Bathroom	Airflow	≥ 20 CFM	≥ 50 CFM	☐	☐ 📷	-
	Sound	Required: ≤ 1 sone	Recommended: ≤ 3 sones			
9. Filtration						
9.1 MERV 6+ filter(s) installed in each ducted mech. system, designed so all return and mechanically supplied outdoor air passes through filter(s) prior to conditioning, and located to facilitate occupant access & regular service. [50]				☐	☐	☐
9.2 Filter access panel includes gasket and fits snugly against exposed edge of filter when closed to prevent bypass. [51]				☐	☐	☐
10. Combustion Appliances						
10.1 Furnaces, boilers, & water heaters are mechanically drafted or direct-vented. Alternatives in Footnote 54. [52, 53, 54]				☐	☐	☐
10.2 Fireplaces are mechanically drafted or direct-vented. Alternatives in Footnote 55. [52, 53, 55]				☐	☐	☐
10.3 No unvented combustion appliances other than cooking ranges or ovens are located inside the home's pressure boundary. Alternative in Footnote 57. [52, 56, 57]				☐	☐	☐

Rater Name: _____ Rater Pre-Drywall Inspection Date[58]: _____ Rater Initials: ____ Photo of Rater[3] ☐ 📷

Rater Name: _____ Rater Final Inspection Date[59]: _____ Rater Initials: ____ Photo of Rater[3] ☐ 📷

Builder Employee: _____ Builder Inspection Date: _____ Builder Initials: ____

ENERGY STAR Single-Family New Homes
National Rater Field Checklist, Version 3.1 / 3.2 / 3.3 (Rev. 14)

HVAC System [18]			Must Correct	Rater Verified[2, 3]	N/A [4]
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Track A	5a.1 Blower fan volumetric airflow is Grade I or II per ANSI / RESNET / ACCA / ICC 310.		☐	☐ 📷	☐
	5a.2 Blower fan watt draw is Grade I or II per ANSI / RESNET / ACCA / ICC 310.		☐	☐	☐
	5a.3 Refrigerant charge is Grade I per ANSI / RESNET / ACCA / ICC 310. See Footnote 21 for exemptions. [21]		☐	☐	☐
Track B	5b.1 HVAC manufacturer & model number on installed equipment matches either of the following (check box):[22] ☐ National HVAC Design Report ☐ Written approval received from designer		☐	☐ 📷	☐
	5b.2 External static pressure measured by Rater at contractor-provided test locations and documented below:[23] Return-Side External Static Pressure: _____IWC Supply-Side External Static Pressure: _____IWC		☐	☐	☐
	5b.3 Permitted, but not required: National HVAC Commissioning Checklist collected, with no items left blank.		☐	☐	☐
6. Duct Quality Installation (Applies to Heating, Cooling, Ventilation, Exhaust, & Pressure Balancing Ducts, Unless Noted in Footnote)					
6.1 Ductwork installed without kinks, sharp bends, compressions, or excessive coiled flexible ductwork. [24]			☐	☐	☐
6.2 Bedrooms pressure-balanced (e.g., using transfer grilles, jump ducts, dedicated return ducts, undercut doors) to achieve a Rater-measured pressure differential ≥ -3 Pa and ≤ +3 Pa with respect to the main body of the house when all air handlers are operating. Test configuration and an alternative compliance option in Footnote 25. [25]			☐	☐ 📷	-
6.3 All supply and return ducts in unconditioned space, including connections to trunk ducts, are insulated to ≥ R-6. [26]			☐	☐	☐
6.4 Rater-measured total duct leakage meets one of the following two options. Alternative in Footnote 28: [27, 28, 29]					
6.4.1 Rough-in: The greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25, with air handler & all ducts, building cavities used as ducts, & duct boots installed. All duct boots sealed to finished surface, Rater-verified at final. [30]			☐	☐ 📷	☐
6.4.2 Final: The greater of ≤ 8 CFM25 per 100 sq. ft. of CFA or ≤ 80 CFM25, with the air handler & all ducts, building cavities used as ducts, duct boots, & register grilles atop the finished surface (e.g., drywall, floor) installed. [31]			☐	☐ 📷	☐
6.5 Rater-measured duct leakage to outdoors the greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25. [27, 32]			☐	☐ 📷	☐
7. Dwelling Unit Mechanical Ventilation Systems ("Vent System") [33] & Inlets in Return Duct [34]					
7.1 Rater-measured ventilation rate is within either ± 15 CFM or ±15% of design report value. [35]			☐	☐ 📷	-
7.2 A readily-accessible ventilation override control installed and also labeled if its function is not obvious (e.g., a label is required for a toggle wall switch, but not for a switch that's on the ventilation equipment). [36]			☐	☐	-
7.3 For any outdoor air inlet connected to a ducted return of the HVAC system (Complete if present; otherwise check "N/A"): [34]					☐
7.3.1 Controls automatically restrict airflow using a motorized damper during vent. off-cycle and occupant override. [37]			☐	☐	-
7.3.2 Rater-measured vent. rate is ≤ 15 CFM or 15% above design value at highest HVAC fan speed. Alt. in Fn. 38. [38]			☐	☐	-
7.4 System fan rated ≤ 3 sones if intermittent and ≤ 1 sone if continuous, or exempted. [39]			☐	☐	-
7.5 If Vent System controller operates the HVAC fan, then HVAC fan operation is intermittent and either the fan type is ECM / ICM or the controls will reduce the run-time by accounting for HVAC system heating or cooling hours. [40]			☐	☐	☐
7.6 Bathroom fans are ENERGY STAR certified if used as part of the Vent System. [41]			☐	☐	☐
7.7 Air inlet location (Complete if ventilation air inlet location was specified on design report; otherwise check "N/A"): [42, 43]					☐
7.7.1 Inlet pulls ventilation air directly from outdoors and not from attic, crawlspace, garage, or adjacent dwelling unit.			☐	☐	-
7.7.2 Inlet is ≥ 2 ft. above grade or roof deck; ≥ 10 ft. of stretched-string distance from known contamination sources not exiting the roof, and ≥ 3 ft. distance from dryer exhausts and sources exiting the roof. [44]			☐	☐	-
7.7.3 Inlet is provided with rodent / insect screen with ≤ 0.5 in. mesh.			☐	☐	-
8. Local Mechanical Exhaust – In each kitchen and bathroom, a system is installed that exhausts directly to the outdoors and meets one of the following Rater-measured airflow and manufacturer-rated sound level standards: [35, 45]					
Location		**Continuous Rate**	**Intermittent Rate [46]**		
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume [47, 48]	≥ 100 CFM and, if not integrated with range, also ≥ 5 ACH based on kitchen volume [47, 48, 49]	☐	☐ 📷 -
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones		
8.2 Bathroom	Airflow	≥ 20 CFM	≥ 50 CFM	☐	☐ 📷 -
	Sound	Required: ≤ 1 sone	Recommended: ≤ 3 sones		
9. Filtration					
9.1 MERV 6+ filter(s) installed in each ducted mech. system, designed so all return and mechanically supplied outdoor air passes through filter(s) prior to conditioning, and located to facilitate occupant access & regular service. [50]				☐	☐ ☐
9.2 Filter access panel includes gasket and fits snugly against exposed edge of filter when closed to prevent bypass. [51]				☐	☐ ☐
10. Combustion Appliances					
10.1 Furnaces, boilers, & water heaters are mechanically drafted or direct-vented. Alternatives in Footnote 54. [52, 53, 54]				☐	☐ ☐
10.2 Fireplaces are mechanically drafted or direct-vented. Alternatives in Footnote 55. [52, 53, 55]				☐	☐ ☐
10.3 No unvented combustion appliances other than cooking ranges or ovens are located inside the home's pressure boundary. Alternative in Footnote 57. [52, 56, 57]				☐	☐ ☐

Rater Name: _____ Rater Pre-Drywall Inspection Date[58]: _____ Rater Initials: ____ Photo of Rater[3] ☐ 📷
Rater Name: _____ Rater Final Inspection Date[59]: _____ Rater Initials: ____ Photo of Rater[3] ☐ 📷
Builder Employee: _____ Builder Inspection Date: _____ Builder Initials: ____

At each inspection (i.e., pre-drywall and final), the Rater is required to capture a geo-tagged and time-stamped photo of themselves in front of the dwelling unit.

Thermal Enclosure System	Must Correct	Builder Verified [1]	Rater Verified [2, 3]	N/A [4]
1. High-Performance Insulation & Fenestration				
1.1 Insulation meets specifications in National Rater Design Review Checklist Item 2.1.	☐	Pre-rock+50 ☐	☐ 📷	-
1.2 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 5. [5, 6]	☐	Pre-rock+50 ☐	☐ 📷	-
1.3 Fenestration meets specifications in National Rater Design Review Checklist Items 2.1 & 2.2.	☐	-	☐	-
2. Fully-Aligned Air Barriers [7] - At each insulated location below, a complete air barrier is provided that is fully aligned as follows:				
Ceilings: At interior or exterior horizontal surface of ceiling insulation in Climate Zones 1-3; at interior horizontal surface of ceiling insulation in Climate Zones 4-8. Also, at exterior vertical surface of ceiling insulation in all climate zones (e.g., using a wind baffle that extends to the full height of the insulation in every bay or a tabbed baffle in each bay with a soffit vent that prevents wind washing in adjacent bays). [8, 9]				
2.1 Dropped ceilings / soffits below unconditioned attics, and all other ceilings.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
Walls: At exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in Climate Zones 4-8. [9, 10]				
2.2 Walls behind showers, tubs, staircases, and fireplaces.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.3 Attic knee walls and skylight shaft walls. [11]	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.4 Walls adjoining porch roofs or garages.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.5 Double-walls and all other exterior walls.	☐	≤ 50 sq. ft. ☐	☐	-
Floors: At exterior vertical surface of floor insulation in all climate zones and, if over unconditioned space, also at interior horizontal surface including supports to ensure alignment. Alternatives in Footnotes 13 & 14. [12, 13, 14]				
2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.	☐	≤ 50 sq. ft. ☐	☐ 📷	☐
2.7 All other floors adjoining unconditioned space (e.g., rim / band joists at exterior wall or at porch roof).	☐	≤ 50 sq. ft. ☐	☐	☐
3. Reduced Thermal Bridging – Reduced thermal bridging strategies are not mandatory. However, the following details must be accurately assessed per ANSI / RESNET / ICC 301. [15]				
3.1 Insulated ceilings assessed at the attic edge for variance in R-value and install quality.	☐	-	☐	☐
3.2 Insulation assessed beneath attic platforms and walkways for variance in R-value and install quality.	☐	-	☐	☐
3.3 Attic access panels, drop-down stairs, & whole-house fans assessed for insulated covers.	☐	-	☐	☐
3.4 Above-grade walls separating conditioned from unconditioned space assessed for advanced framing.	☐	-	☐	☐
3.5 Slabs on grade assessed for insulation where walls separate conditioned from unconditioned space.	☐	-	☐	☐
4. Air Sealing				
4.1 Rater has verified each air sealing detail below. In addition, the home must meet Item 4.2. Unless otherwise noted below, "sealed" indicates the use of caulk, foam, or equivalent material.				
4.1.1 Ducts, flues, shafts, plumbing, piping, wiring, exhaust fans, & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	☐	≤ 5 penetrations ☐	☐	-
4.1.2 Attic access panels, drop-down stairs, & whole house fans are gasketed (i.e., not caulked) or equipped with covers that are gasketed.	☐	-	☐ 📷	☐
4.1.3 Recessed lighting fixtures adjacent to unconditioned space are ICAT labeled and gasketed.	☐	No Limit ☐	☐	☐
4.1.4 Drywall is sealed to top plate during installation, or from the attic side, at all unconditioned attic / wall interfaces. Drywall adhesive (but not other construction adhesives) is permitted to be used.	☐	No Limit ☐	☐	☐
4.1.5 Rough opening around windows & exterior doors is sealed.	☐	-	☐	-
4.1.6 Walls that separate attached garages from occupiable space are sealed. In addition, an air barrier is installed and sealed at floor cavities aligned with these walls.	☐	-	☐ 📷	☐
4.1.7 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions are made substantially air-tight with weatherstripping or equivalent gasket.	☐	-	☐	☐
4.1.8 Above-grade sill plates adjacent to conditioned space sealed to foundation or sub-floor.	☐	No Limit ☐	☐	☐
4.1.9 In townhouses and duplexes, for fire-rated area separation walls, gap is sealed between the drywall common wall and the structural framing at all exterior boundaries.	☐	No Limit ☐	☐	☐
4.2 Rater-measured air leakage of Dwelling or Dwelling Unit meets one of the following: [16]				
4.2.1 For all Versions except those noted below: ≤ 4.5 ACH50 For National v3.2 and CA v3.4: ≤ 4.0 ACH50 (see exception in Fn. 17) [17] For National v3.3 and CA v3.5: ≤ 3.5 ACH50 (see exception in Fn. 17) [17]	☐	-	☐ 📷	☐
4.2.2 As an alternative, for a Dwelling with ≤ 1,500 sq. ft. of Conditioned Floor Area, a Townhouse, or an attached Dwelling Unit, air leakage is ≤ 0.30 CFM50 per sq ft. of Dwelling Unit Compartmentalization Boundary area.	☐	-	☐ 📷	☐

HVAC System [18]			Must Correct	Rater Verified [2, 3]	N/A [4]
5. Heating & Cooling Equipment - Complete Track A - HVAC Grading [19] or Track B - HVAC Credential [20]					
Track A	5a.1 Blower fan volumetric airflow is Grade I or II per ANSI / RESNET / ACCA / ICC 310.		☐	☐ 📷	☐
	5a.2 Blower fan watt draw is Grade I or II per ANSI / RESNET / ACCA / ICC 310.		☐	☐	☐
	5a.3 Refrigerant charge is Grade I per ANSI / RESNET / ACCA / ICC 310. See Footnote 21 for exemptions. [21]		☐	☐	☐
Track B	5b.1 HVAC manufacturer & model number on installed equipment matches either of the following (check box):[22] ☐ National HVAC Design Report ☐ Written approval received from designer		☐	☐ 📷	☐
	5b.2 External static pressure measured by Rater at contractor-provided test locations and documented below:[23] Return-Side External Static Pressure: _____IWC Supply-Side External Static Pressure: _____IWC		☐	☐	☐
	5b.3 Permitted, but not required: National HVAC Commissioning Checklist collected, with no items left blank.		☐	☐	☐
6. Duct Quality Installation (Applies to Heating, Cooling, Ventilation, Exhaust, & Pressure Balancing Ducts, Unless Noted in Footnote)					
6.1 Ductwork installed without kinks, sharp bends, compressions, or excessive coiled flexible ductwork. [24]			☐	☐	☐
6.2 Bedrooms pressure-balanced (e.g., using transfer grilles, jump ducts, dedicated return ducts, undercut doors) to achieve a Rater-measured pressure differential ≥ -3 Pa and ≤ +3 Pa with respect to the main body of the house when all air handlers are operating. Test configuration and an alternative compliance option in Footnote 25. [25]			☐	☐ 📷	-
6.3 All supply and return ducts in unconditioned space, including connections to trunk ducts, are insulated to ≥ R-6. [26]			☐	☐	☐
6.4 Rater-measured total duct leakage meets one of the following two options. Alternative in Footnote 28: [27, 28, 29]					
6.4.1 Rough-in: The greater of ≤ 4 CFM25 per 100 sq. ft. of CFA or ≤ 40 CFM25, with air handler & all ducts, building cavities used as ducts, & duct boots installed. All duct boots sealed to finished surface, Rater-verified at final. [30]			☐	☐ 📷	☐
6.4.2 Final: The greater of ≤ 8 CFM25 per 100 sq. ft. of CFA or ≤ 80 CFM25, with the air handler & all ducts, building cavities used as ducts, duct boots, & register grilles atop the finished surface (e.g., drywall, floor) installed. [31]			☐	☐ 📷	☐
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7. Dwelling Unit Mechanical Ventilation Systems ("Vent System") [33] & Inlets in Return Duct [34]					
7.1 Rater-measured ventilation rate is within either ± 15 CFM or ±15% of design report value. [35]			☐	☐ 📷	-
7.2 A readily-accessible ventilation override control installed and also labeled if its function is not obvious (e.g., a label is required for a toggle wall switch, but not for a switch that's on the ventilation equipment). [36]			☐	☐	-
7.3 For any outdoor air inlet connected to a ducted return of the HVAC system (Complete if present; otherwise check "N/A"): [34]					☐
7.3.1 Controls automatically restrict airflow using a motorized damper during vent. off-cycle and occupant override. [37]			☐	☐	-
7.3.2 Rater-measured vent. rate is ≤ 15 CFM or 15% above design value at highest HVAC fan speed. Alt. in Fn. 38. [38]			☐	☐	-
7.4 System fan rated ≤ 3 sones if intermittent and ≤ 1 sone if continuous, or exempted. [39]			☐	☐	-
7.5 If Vent System controller operates the HVAC fan, then HVAC fan operation is intermittent and either the fan type is ECM / ICM or the controls will reduce the run-time by accounting for HVAC system heating or cooling hours. [40]			☐	☐	☐
7.6 Bathroom fans are ENERGY STAR certified if used as part of the Vent System. [41]			☐	☐	☐
7.7 Air inlet location (Complete if ventilation air inlet location was specified on design report; otherwise check "N/A"): [42, 43]					☐
7.7.1 Inlet pulls ventilation air directly from outdoors and not from attic, crawlspace, garage, or adjacent dwelling unit.			☐	☐	-
7.7.2 Inlet is ≥ 2 ft. above grade or roof deck; ≥ 10 ft. of stretched-string distance from known contamination sources not exiting the roof, and ≥ 3 ft. distance from dryer exhausts and sources exiting the roof. [44]			☐	☐	-
7.7.3 Inlet is provided with rodent / insect screen with ≤ 0.5 in. mesh.			☐	☐	-
8. Local Mechanical Exhaust – In each kitchen and bathroom, a system is installed that exhausts directly to the outdoors and meets one of the following Rater-measured airflow and manufacturer-rated sound level standards: [35, 45]					
Location		**Continuous Rate**	**Intermittent Rate** [46]		
8.1 Kitchen	Airflow	≥ 5 ACH, based on kitchen volume [47, 48]	≥ 100 CFM and, if not integrated with range, also ≥ 5 ACH based on kitchen volume [47, 48, 49]	☐	☐ 📷 -
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones		
8.2 Bathroom	Airflow	≥ 20 CFM	≥ 50 CFM	☐	☐ 📷 -
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9. Filtration					
9.1 MERV 6+ filter(s) installed in each ducted mech. system, designed so all return and mechanically supplied outdoor air passes through filter(s) prior to conditioning, and located to facilitate occupant access & regular service. [50]				☐	☐ ☐
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10. Combustion Appliances					
10.1 Furnaces, boilers, & water heaters are mechanically drafted or direct-vented. Alternatives in Footnote 54. [52, 53, 54]				☐	☐ ☐
10.2 Fireplaces are mechanically drafted or direct-vented. Alternatives in Footnote 55. [52, 53, 55]				☐	☐ ☐
10.3 No unvented combustion appliances other than cooking ranges or ovens are located inside the home's pressure boundary. Alternative in Footnote 57. [52, 56, 57]				☐	☐ ☐

On-Site Photos for Multifamily New Construction (MFNC)

For MFNC, the National Rater Field Checklist defers to the existing MFNC Photo Documentation Guidance Document, which generally requires one photo per unique appliance/assembly/instance/etc.

Rater Name: _____	Rater Pre-Drywall Inspection Date(s) [88]: _____	Rater Initials: _____
Rater Company Name: _____	On-site Photos Documented [89] ☐ 📷	
Rater Name: _____	Rater Final Inspection Date(s) [90]: _____	Rater Initials: _____
Rater Company Name: _____	On-site Photos Documented [89] ☐ 📷	

89. The Rater is required to capture photos according to the Photo Documentation Guidance Document available at www.energystar.gov/mfnc, which generally requires one representative photo per building for each specified item, as well as one geo-tagged and time-stamped photo of the Rater in front of the dwelling unit or building during each inspection.

ENERGY STAR's Conference Track

Catch our other sessions!

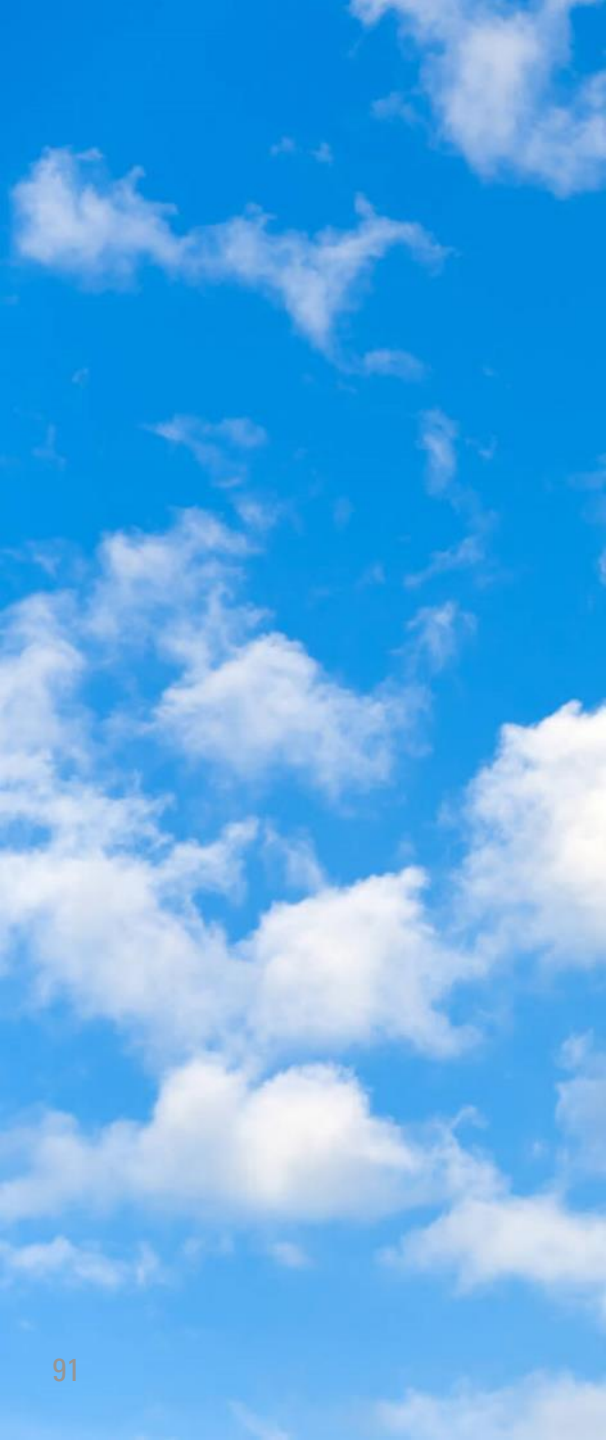
Now in Effect: ENERGY STAR's Enhanced Inspection and Quality Control Protocols
Monday 2:30 PM at Joshua Tree – Elliot Seibert, Scott Doyle (RESNET)

A Beginner's Guide to ENERGY STAR Multifamily New Construction
Monday 4:00 PM at Joshua Tree – Rebecca Hudson, Gayathri Vijayakumar (SWA)

Tips and Tricks for Meeting the Latest ENERGY STAR Program Requirements – and Beyond
Tuesday 1:00 PM at Joshua Tree – Dean Gamble, Rebecca Hudson

ENERGY STAR: Multifamily New Construction (MFNC) Revision 5
Tuesday 2:30 PM at Joshua Tree – Rebecca Hudson, Gayathri Vijayakumar (SWA)

Level up with ENERGY STAR NextGen: Program Updates and Rater Training
Tuesday 4:00 PM at Joshua Tree – Zak Shadid, Dylan Tindall (the BER)



Questions?

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