



# ENERGY STAR Single-Family New Homes Quality Assurance & Certification Review Checklists, Version 3 / 3.1 / 3.2 (Rev. 12)

An ENERGY STAR Quality Assurance Checklist shall be completed during each quality assurance file review and field review (QA review) of homes being certified through the ENERGY STAR Single-Family New Homes program in accordance with the policies and procedures of the Home Certification Organization (HCO) <sup>1</sup>. This revision of the QA checklist is mandatory for homes certified under Version 3 / 3.1 / 3.2, Revision 12. QA reviews for homes certified under Revision 11 may continue to use the prior revision of this document (Rev. 11). Review complete instructions on page 4.

## ENERGY STAR Quality Assurance Checklist

Home Address: _____ City: _____ State: _____ Zip Code: _____			
<b>QA Review</b>		Review Type: <input type="checkbox"/> File <input type="checkbox"/> Field	QA Reviewer: _____ Date of Review: _____
		Rater Being QA'd: _____	Status of home: <input type="checkbox"/> Pre-drywall <input type="checkbox"/> Final construction or completed
<b>Original Rating</b>		Rater Company Name: _____	
<b>Pre-Drywall Inspection:</b>		Rater Name: _____	Rater ID #: _____ Date: _____
<b>Final Inspection:</b>		Rater Name: _____	Rater ID #: _____ Date: _____
<b>Action Items / Summary of QA</b>			
		<b>Yes</b>	<b>No</b>
		<b>N/A</b>	
If any Items are marked "No" or "Not Verified," an action/explanation summary document shall be attached.			
		<input type="checkbox"/>	-
		<input type="checkbox"/>	-
<b>Documentation Collection – Collect these items as part of the QA data file</b>			
		<b>Yes</b>	<b>No</b>
		<b>N/A</b>	
A) Energy Rating File collected.			
		<input type="checkbox"/>	<input type="checkbox"/>
B) National Rater Design Review Checklist collected, with no applicable Items left blank.			
		<input type="checkbox"/>	<input type="checkbox"/>
C) Documentation that builder had an ENERGY STAR partnership agreement at the time of certification. If documentation of active partnership cannot be verified, contact <a href="mailto:energystarhomes@energystar.gov">energystarhomes@energystar.gov</a> .			
		<input type="checkbox"/>	<input type="checkbox"/>
<b>If Track A – HVAC Grading was pursued:</b>			
D) HVAC design report compliant with ANSI / RESNET / ACCA / ICC Std. 310, and the National HVAC Design Supplement to Std. 310 for Dwelling & Units, collected, with no applicable Items left blank.		<input type="checkbox"/>	<input type="checkbox"/>
E) ANSI / RESNET / ACCA / ICC Std. 310 design review criteria have been met for applicable housing type.		<input type="checkbox"/>	<input type="checkbox"/>
<b>If Track B – HVAC Credential was pursued:</b>			
D) ENERGY STAR National HVAC Design Report collected, with no applicable Items left blank.		<input type="checkbox"/>	<input type="checkbox"/>
E) Documentation that HVAC contractor held required credential at the time of certification, unless all equipment is an exempted type, in which case check: <input type="checkbox"/> Exempted If documentation or active credential cannot be verified, contact <a href="mailto:energystarhomes@energystar.gov">energystarhomes@energystar.gov</a> .		<input type="checkbox"/>	<input type="checkbox"/>
F) National Rater Field Checklist collected, with no Items left blank or marked Must Correct.		<input type="checkbox"/>	<input type="checkbox"/>
List of any exemptions or alternatives used by the Rater.		<input type="checkbox"/>	<input type="checkbox"/>
Per 5b.1, written approval from designer collected if installed models do not match National HVAC Design Report.		<input type="checkbox"/>	<input type="checkbox"/>
Per 7.7, if smaller distance is used for inlet and outlet of balanced ventilation system per footnote, manufacturer's instructions collected indicating that the smaller distance may be used.		<input type="checkbox"/>	<input type="checkbox"/>
Rater name, Rater inspection dates and Rater initials are recorded.		<input type="checkbox"/>	<input type="checkbox"/>
If any Builder Verified Items are used, builder employee, builder inspection date and builder initials are recorded.		<input type="checkbox"/>	<input type="checkbox"/>
<b>Energy Rating File</b>			
		<b>Yes</b>	<b>No</b>
		<b>N/A</b>	
Energy Rating file passes the Home Certification Organization's (HCO's) quality assurance review checklist. <sup>1</sup>			
		<input type="checkbox"/>	<input type="checkbox"/>
ERI of the home meets or exceeds the ENERGY STAR ERI Target for the program version applicable at the time of certification.			
		<input type="checkbox"/>	<input type="checkbox"/>
Energy Rating file is consistent with the National Rater Design Review Checklist			
		<input type="checkbox"/>	<input type="checkbox"/>
2.1 Modeled fenestration meets or exceeds 2009 IECC or, for National v3.2, 2021 IECC requirements.			
		<input type="checkbox"/>	<input type="checkbox"/>
3.1 Modeled total building thermal envelope UA meets one of the following options. Note: Item 3.1.2 is not an option for National v3.2.			
		<input type="checkbox"/>	<input type="checkbox"/>
3.1.1 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 OR; <sup>2</sup>			
		<input type="checkbox"/>	<input type="checkbox"/>
3.1.2 For all Versions except National v3.2: Achieves ≤ 133% of the total UA resulting from the U-factors in the 2009 IECC Table 402.1.3, AND modeled infiltration does not exceed:			
		<input type="checkbox"/>	<input type="checkbox"/>
2009 IECC Climate Zone	1 - 2	3 - 4	5 - 7
Infiltration Limit (ACH50)	≤ 3.0	≤ 2.5	≤ 2.0
			8
			≤ 1.5



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Energy Rating File (cont.)	Yes	No	N/A											
Energy Rating file is consistent with the National Rater Field Checklist	<input type="checkbox"/>	<input type="checkbox"/>	-											
1.3 Modeled insulation achieves Grade I install. per ANSI / RESNET / ICC Std. 301. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	-											
3.1, 3.3 & 4.10 Modeled attic insulation meets minimum R-value at perimeter, platforms and attic covers. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	-											
3.2 For slabs on grade in CZ 4-8, slab edge modeled with ≥ R-5 insulation at depth specified by the 2009 IECC. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
3.4 Modeled above grade walls are consistent with documented thermal bridging strategy (3.4.1, 3.4.2 or 3.4.3). <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	-											
6.3 Modeled supply and return ducts in unconditioned space are insulated to ≥ R-6. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
6.4 & 6.5 Modeled duct leakage is consistent with Items 6.4 (total leakage) and 6.5 (leakage to outdoors). <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
7.1 Modeled ventilation rate is within ± 15 CFM or ± 15% of design report value (2.3).	<input type="checkbox"/>	<input type="checkbox"/>	-											
National Rater Design Review Checklist	Yes	No	N/A											
<b>If Track A – HVAC Grading was pursued:</b>														
4a.3 Cooling sizing % is within the cooling sizing limit selected by the HVAC designer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
<b>If Track B – HVAC Credential was pursued:</b>														
4b.2 HVAC Design Report reviewed by Rater for the following parameters (National HVAC Design Report Item # in parenthesis):														
4b.2.1 Cooling season and heating season outdoor design temperatures used in loads (3.3) are within the limits defined at <a href="http://energystar.gov/hvacdesigntemps">energystar.gov/hvacdesigntemps</a> for the State and County, or US Territory where the home is built or the designer has provided an allowance from EPA to use alternative values.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.2 Number of occupants used in loads (3.4) is within ± 2 of the home being reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.3 Conditioned floor area used in loads (3.5) is between 100 sq. ft. smaller and 300 sq. ft. larger than the home being reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.4 Window area used in loads (3.6) is between 15 sq. ft. smaller and 60 sq. ft. larger than the home being reviewed or, for homes with > 500 sq. ft. of window area, between 3% smaller and 12% larger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.6 Sensible, latent & total heat gain are documented (3.10 – 3.12) for the orientation of the home being reviewed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.7 The difference between the maximum total heat gain across orientations and that of the orientation of the home being reviewed (3.13) is ≤ 6 kBtuh. <sup>3</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
4b.2.8 Cooling sizing % (4.13) is within the cooling sizing limit (4.15) selected by the HVAC designer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
National Rater Field Checklist – Mandatory during Field Review only. As an alternative, complete and attach the National Rater Field Checklist, Version 3 / 3.1 / 3.2 (Rev. 12).	Yes	No	Not Verified	N/A										
<b>1. High-Performance Fenestration &amp; Insulation</b>														
1.2 Accessible insulation (ceiling, wall, floor, and slab) and rater’s documentation of insulation specifications complies with one of the following options, as specified in Item 3.1 of the National Rater Design Review Checklist. Note: Item 3.1.2 is not an option for National v3.2. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
3.1.1 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 <b>OR</b> ;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
3.1.2 For all Versions except National v3.2: Meets or exceeds the modeled levels AND home infiltration does not exceed the following:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>2009 IECC Climate Zone</td> <td>1 - 2</td> <td>3 - 4</td> <td>5 - 7</td> <td>8</td> </tr> <tr> <td>Infiltration Limit (ACH50)</td> <td>≤ 3.0</td> <td>≤ 2.5</td> <td>≤ 2.0</td> <td>≤ 1.5</td> </tr> </table>	2009 IECC Climate Zone	1 - 2	3 - 4	5 - 7	8	Infiltration Limit (ACH50)	≤ 3.0	≤ 2.5	≤ 2.0	≤ 1.5				
2009 IECC Climate Zone	1 - 2	3 - 4	5 - 7	8										
Infiltration Limit (ACH50)	≤ 3.0	≤ 2.5	≤ 2.0	≤ 1.5										
1.3 All insulation achieves Grade I install. per ANSI / RESNET / ICC Std. 301. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
<b>2. Fully-Aligned Air Barriers</b>														
2.3 At attic knee walls and skylight shaft walls, a complete air barrier provided that is fully aligned at exterior vertical surface of wall insulation in all climate zones; also at interior vertical surface of wall insulation in CZ 4-8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>3. Reduced Thermal Bridging</b>														
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
3.3 Insulation beneath attic platforms (e.g., HVAC platforms, walkways) ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>4. Air Sealing</b>														
4.1 Visible ducts, flues, shafts, plumbing, piping, wiring, exhaust fans & other penetrations to unconditioned space sealed, with blocking / flashing as needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
4.2 Recessed lighting fixtures adjacent to unconditioned space ICAT labeled and gasketed. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
4.9 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions made substantially air-tight with weatherstripping or equivalent gasket.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
4.10 Attic access panels, drop-down stairs, & whole-house fans equipped with durable ≥ R-10 cover that is gasketed (i.e., not caulked). Fan covers either installed on house side or mechanically operated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										



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5. Heating & Cooling Equipment - Complete Track A - HVAC Grading or Track B - HVAC Credential		Yes	No	Not Verified	N/A
Track A	5a.1 Blower fan volumetric airflow is Grade I or II per ANSI / RESNET / ACCA / ICC 310.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5a.2 Blower fan watt draw is Grade I or II per ANSI / RESNET / ACCA / ICC 310.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5a.3 Refrigerant charge is Grade I per ANSI / RESNET / ACCA / ICC 310. <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Track B	5b.1 In accordance with the checkbox selected by the Rater, HVAC manufacturer & model number of installed equipment matches either of the following (check box): <sup>2,3</sup> <input type="checkbox"/> National HVAC Design Report <input type="checkbox"/> Written approval from designer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6. Duct Quality Installation</b>					
6.1 Ductwork installed without kinks, sharp bends, compression or excessive coiled flexible ductwork.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2 Bedrooms pressure-balanced using any combination of transfer grills, jump ducts, dedicated return ducts, and / or undercut doors to achieve measured pressure differential $\geq -3$ Pa and $\leq +3$ Pa with respect to main body of the house when all bedroom doors are closed & all air handlers are operating. For bedrooms with a design airflow $\geq 150$ CFM as reported in item 5.5 of the HVAC Design Report, measured pressure differential $\geq -5$ Pa $\leq 5$ Pa.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
6.3 All supply and return ducts in unconditioned space, including connections to trunk ducts, are insulated to $\geq R-6$ .		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4 Measured total duct leakage meets the greater of $\leq 8$ CFM25 per 100 sq. ft. of CFA or $\leq 80$ CFM; or, for a duct system with three or more returns, $\leq 12$ CFM25 per 100 sq. ft. of CFA or $\leq 120$ CFM. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.5 Measured duct leakage to outdoors is the greater of $\leq 4$ CFM25 per 100 sq. ft. of CFA or $\leq 40$ CFM25. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7. Dwelling Unit Mechanical Ventilation Systems &amp; Inlets In Return Duct</b>					
7.1 Measured ventilation rate is within $\pm 15$ CFM or $\pm 15\%$ of design report value.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
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).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
7.3 For any outdoor air inlet connected to a ducted return of the HVAC system (Complete if present; otherwise check "N/A"): <sup>2</sup>					<input type="checkbox"/>
7.3.1 Controls automatically restrict airflow using a motorized damper during vent. off-cycle and occupant override. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3.2 Measured vent. rate is $\leq 15$ CFM or 15% above design value at highest HVAC fan speed. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7 Air inlet location (Complete if ventilation air inlet location was specified on design report; otherwise check "N/A"): <sup>3</sup>		-	-	-	<input type="checkbox"/>
7.7.1 Inlet pulls ventilation air directly from outdoors & not from attic, crawlspace, garage, or adjacent dwelling unit.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
7.7.2 Inlet is $\geq 2$ ft. above grade or roof deck; $\geq 10$ ft. of stretched-string distance from known contamination sources not exiting the roof, and $\geq 3$ ft. distance from dryer exhausts and sources exiting the roof.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
7.7.3 Inlet is provided with rodent / insect screen with $\leq 0.5$ inch mesh.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-
<b>8. Local Mechanical Exhaust</b>					
In each kitchen & bathroom, system is installed that exhausts directly to outdoors & meets one of the following measured airflow standards:					
<b>Location</b>	<b>Continuous Rate</b>	<b>Intermittent Rate</b>			
8.1 Kitchen	$\geq 5$ ACH, based on kitchen volume. <sup>2</sup>	$\geq 100$ CFM and, if not integrated with range, also $\geq 5$ ACH based on kitchen volume <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>
8.2 Bathroom	$\geq 20$ CFM	$\geq 50$ CFM		<input type="checkbox"/>	<input type="checkbox"/>
<b>9. Filtration</b>					
9.1 Filter location capable of accepting a MERV 6 filter installed in each ducted mechanical system in a location where all return and mechanically supplied outdoor air passes through filter(s) prior to conditioning, and that facilitates access and regular service by the occupant. <sup>2,3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2 Filter access panel includes gasket or comparable sealing mechanism and fits snugly against the exposed edge of filter when closed to prevent bypass.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>10. Combustion Appliances</b>					
10.1 Furnaces, boilers, and water heaters located within the home's pressure boundary are mechanically drafted or direct-vented. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.2 Fireplaces located within the home's pressure boundary are mechanically drafted or direct-vented. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.3 No unvented combustion appliances other than cooking ranges or ovens are located inside the home's pressure boundary.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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## Instructions for Performing Quality Assurance Review

- During File Review, complete the Action Items / Summary of QA, Documentation Collection, Energy Rating File and National Rater Design Review Checklist sections. During Field Review, complete the entire checklist.
- In accordance with the HCO's policies, a limited amount of the required QA Field Reviews may be performed at the pre-drywall stage. Mark items that are not yet installed as "N/A."<sup>1</sup>
- Where a checklist item cannot be verified because it is not visible, not accessible, cannot be tested, or there are other extenuating circumstances, mark the box in the column "Not Verified," and include an explanation in an attached document.
- Additional items may be reviewed at the reviewer's discretion and included in the Additional Checklist Items and Exemptions report below.
- Items found to be out of compliance shall be corrected. If correction is not possible, the home's certification is required to be withdrawn (please contact [energystarhomes@energystar.gov](mailto:energystarhomes@energystar.gov) for guidance).

## Footnotes

1. Home Certification Organizations (HCOs) are independent organizations recognized by EPA to implement an ENERGY STAR certification program for single-family and multifamily homes and apartments using an Energy Rating Index (ERI) compliance path. Learn more and find a current list of HCOs at [energystar.gov/partner\\_resources/residential\\_new/working/other\\_participants/hco](http://energystar.gov/partner_resources/residential_new/working/other_participants/hco).
2. This item has been edited for space or has a footnote with an exemption or alternative. Refer to referenced program document for details. When an item is properly met using an exemption or alternative, mark the item as "Yes" and record a description in the Additional Checklist Items and Exemptions table.
3. This requirement is modified from the original program requirement in order to be applicable in the context of a finished home.
4. Homes certified using the ENERGY STAR Single-Family New Homes California Program Requirements, Version 3.3 and later are automatically deemed compliant with Item 3.1 of the National Rater Design Review Checklist.

## Additional Checklist Items and Exemptions

Use this space to list additional Items reviewed and describe any exemptions or alternatives that were used (attach additional pages, if needed)						
Checklist/Section Name	Item #	Notes	Yes	No	Not Verified	N/A
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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## Certification Review

EPA has developed a process, called Certification Review, to address cases where a homeowner has concerns about the ENERGY STAR certification of their home. The purpose of a Certification Review is to determine whether a home should maintain its ENERGY STAR certification. There are two possible outcomes: (1) the home will maintain its ENERGY STAR certification or (2) the home's ENERGY STAR certification will be withdrawn. Learn more at [energystar.gov/partner\\_resources/residential\\_new/certification\\_review](https://energystar.gov/partner_resources/residential_new/certification_review).

### Certification Review Process

When a Home Certification Organization (HCO)<sup>1</sup> receives an eligible homeowner inquiry, the HCO will initiate a Certification Review of the home and assign it to an appropriate individual according to the HCO's policies. The assigned reviewer shall complete the Certification Review within 60 days by performing the following steps.

- 1. Collect Documentation.** Collect all pertinent documentation using the Document Collection sections of the Quality Assurance Checklist and Certification Review Supplement Checklist. Inability to collect a required documentation item constitutes a failure, in which case proceed directly to Step 3: preparing the certification review report.
- 2. Perform Home Inspection.** Coordinate a time with the homeowner to inspect the home. During that inspection, complete the remainder of the Quality Assurance Checklist and Certification Review Supplement Checklist based on observations of the current state of the home.
- 3. Prepare Certification Review Report.** Prepare a report that includes the completed Quality Assurance Checklist and Certification Review Supplement Checklist, documented observations of the home's current state, and a determination of whether the Certification Review passes or fails. Share a copy of the report with the HCO, which will in turn provide a copy to the homeowner.

If the assigned reviewer determines that the Certification Review fails, the ENERGY STAR certification of the home shall be withdrawn.

If the assigned reviewer determines that the Certification Review passes, the ENERGY STAR certification of the home shall be maintained. In that case, the homeowner has the opportunity to appeal the determination. Refer to the HCO's policies for details on the appeals process.

### Instructions for Performing Certification Review

This document should be used in conjunction with the applicable ENERGY STAR Certified Homes Program Requirements, Rater Design Review Checklist, Rater Field Checklist, HVAC Design Report, HVAC Commissioning Checklist, and Water Management System Builder Requirements. Additional program requirements may be inspected and included in the Additional Checklist Items and Exemptions table above. Alternatives and exceptions in those documents, including those in the footnotes, should be considered where applicable. Where a program revision or policy record entry has lowered the stringency of a requirement, the most recent policy may be used, even if it was not in place at the time of original certification.

In general, the benefit of doubt should be given to the original rating unless it is definitively clear that a requirement was not met at time of certification. The assigned reviewer should apply judgment in accounting for normal aging of construction materials over time, such as the settling of blown insulation. For example, for item 4.9 of the National Rater Field Checklist, the focus should be on the *presence* of weatherstripping on doors rather than the current *efficacy* of the weatherstripping. The Certification Review Supplement Checklist modifies performance thresholds for certain checklist items to account for these types of aging effects.

Homes are eligible for Certification Review only if there have been no significant structural changes to the home since it was built. If such modifications are observed, the assigned reviewer has the prerogative to suspend the inspection and share documentation of the observed modifications with the HCO in lieu of the Certification Review Report.

If any individual item on the Rater Quality Assurance Checklist or Certification Review Supplement Checklist is marked as "No", the Certification Review is considered to have failed.

### Guidance on Destructive Testing

At the behest of the homeowner, destructive testing may be used to inspect items that would otherwise not be visible. For example, if it were suspected that no insulation was installed in an exterior wall, observation holes could be drilled in the interior gypsum board. The homeowner bears complete responsibility for arranging all demolition and repair for destructive testing that they elect to undertake. Before undertaking destructive testing, it is recommended that homeowners consult with a qualified expert who can use non-invasive methods like infrared imaging to prioritize areas of concern. Demolition work, such as drilling observation holes, must occur in the presence of the assigned reviewer performing the Certification Review. Areas that are exposed outside the presence of the assigned reviewer shall be ignored for the purpose of the Certification Review.



# ENERGY STAR Single-Family New Homes Quality Assurance & Certification Review Checklists, Version 3 / 3.1 / 3.2 (Rev. 12)

## Certification Review Supplement Checklist

Documentation Collection		Yes	No	N/A											
If Track B – HVAC Credential pursued, HVAC Commissioning Checklist collected, with no applicable Items left blank		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
<b>Energy Rating File</b> – File is consistent with program requirements, Rater’s documentation, and field observations.															
Energy Rating file passes the Home Certification Organization’s (HCO’s) Certification Review checklist. <sup>1</sup>		<input type="checkbox"/>	<input type="checkbox"/>	-											
Rater Field Checklist		Yes	No	Not Verified	N/A										
1.2 If item 3.1 of the Rater Design Review Checklist was met using item 3.1.2, infiltration is permitted to meet the following levels: <sup>4</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">2009 IECC Climate Zone</td> <td style="width: 11%;">1 - 2</td> <td style="width: 11%;">3 - 4</td> <td style="width: 11%;">5 - 7</td> <td style="width: 11%;">8</td> </tr> <tr> <td>Infiltration Limit (ACH50)</td> <td>≤ 4.0</td> <td>≤ 3.5</td> <td>≤ 3.0</td> <td>≤ 2.5</td> </tr> </table>		2009 IECC Climate Zone	1 - 2	3 - 4	5 - 7	8	Infiltration Limit (ACH50)	≤ 4.0	≤ 3.5	≤ 3.0	≤ 2.5				
2009 IECC Climate Zone	1 - 2	3 - 4	5 - 7	8											
Infiltration Limit (ACH50)	≤ 4.0	≤ 3.5	≤ 3.0	≤ 2.5											
<b>6. Duct Quality Installation</b>															
6.2 Measured pressure differential meets ≥ -5 Pa and ≤ 5 Pa or, for bedrooms with a design airflow ≥ 150 CFM, ≥ -8 Pa and ≤ 8 Pa. <sup>3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
6.4 Measured total duct leakage is permitted to meet ≤ 12 CFM25 per 100 sq. ft. of CFA or ≤ 120 CFM or, for a duct system with three or more returns, ≤ 16 CFM25 per 100 sq. ft. of CFA or ≤ 180 CFM. <sup>3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
6.5 Measured duct leakage to outdoors is permitted to meet ≤ 6 CFM25 per 100 sq. ft. of CFA or ≤ 60 CFM25. <sup>3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>7. Whole-House Mechanical Ventilation System</b>															
7.1 Measured ventilation rate is permitted to be within ± 25 CFM or ± 25% of design value (2.3). <sup>3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
7.3 If outdoor inlet connected to a ducted return of the HVAC system, controls automatically restrict airflow during ventilation off-cycle and occupant override. As long as the controls are <i>capable</i> of meeting these criteria, it is permissible for the control’s <i>settings</i> to differ at the time of certification review. <sup>2,3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
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. As long as the controls are <i>capable</i> of meeting these criteria, it is permissible for the control’s <i>settings</i> to differ at the time of certification review. <sup>2,3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>8. Local Mechanical Exhaust</b>															
Kitchen & bathroom exhausts systems are permitted to meet one of the following measured airflow standards: <sup>3</sup>															
Location	Continuous Rate	Intermittent Rate		Yes	No	Not Verified	N/A								
8.1 Kitchen	≥ 3 ACH, based on kitchen volume <sup>2</sup>	≥ 60 CFM and, if not integrated with range, also ≥ 3 ACH based on kitchen volume <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-								
8.2 Bathroom	≥ 12 CFM	≥ 30 CFM		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-								
<b>Water Management System Builder Requirements</b>		Yes	No	Not Verified	N/A										
<b>1. Water-Managed Site and Foundation</b>															
1.1 Patio slabs, porch slabs, walks, and driveways sloped ≥ 0.25 in. per ft. away from home to edge of surface or 10 ft., whichever is less.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
1.2 Final grade sloped ≥ 0.25 in. per ft. away from home for ≥ 10 ft. <sup>2,3</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
1.7 Sump pump covers mechanically attached with full gasket seal or equivalent.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>2. Water-Managed Wall Assembly</b>															
2.1 Flashing at bottom of exterior walls with weep holes included for masonry veneer, or equivalent drainage system. See footnote on the Water Management System Builder Requirements for exemptions. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>3. Water-Managed Roof Assembly</b>															
3.2 For homes that don’t have a slab-on-grade foundation and do have expansive or collapsible soils, gutters & downspouts provided that empty to lateral piping that discharges water on sloping final grade ≥ 5 ft. from foundation, or to underground catchment system. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
<b>4. Water-Managed Building Materials</b>															
4.1 Wall-to-wall carpet <i>not</i> installed within 2.5 ft. of toilets, tubs, and showers.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-										
4.6 For each condensate-producing HVAC component, corrosion-resistant drain pan (e.g., galvanized steel, plastic) included that drains to a conspicuous point of disposal in case of blockage. <sup>2</sup>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										





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## Footnotes

1. Home Certification Organizations (HCOs) are independent organizations recognized by EPA to implement an ENERGY STAR certification program for single-family and multifamily homes and apartments using an Energy Rating Index (ERI) compliance path. Learn more and find a current list of HCOs at [energystar.gov/partner\\_resources/residential\\_new/working/other\\_participants/hco](https://energystar.gov/partner_resources/residential_new/working/other_participants/hco).
2. Where the checklist item cannot be verified because it is not visible, not accessible, cannot be tested, or there are other extenuating circumstances, mark the box in the column "Not Verified," and include an explanation in an attached document.
3. This item has been edited for space or has a footnote with an exemption or alternative. Refer to referenced program document for full details. When an item is properly met using an exemption or alternative, mark the item as "Yes" and record a description in the Additional Checklist Items and Exemptions table.
4. This requirement is modified from the original program requirement in order to be applicable in the context of a finished home.