



VERSION 1 (REV. 04)

# Indoor airPLUS

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# ENERGY STAR + Indoor airPLUS



- Envelope
- HVAC
- Moisture
- CO

+



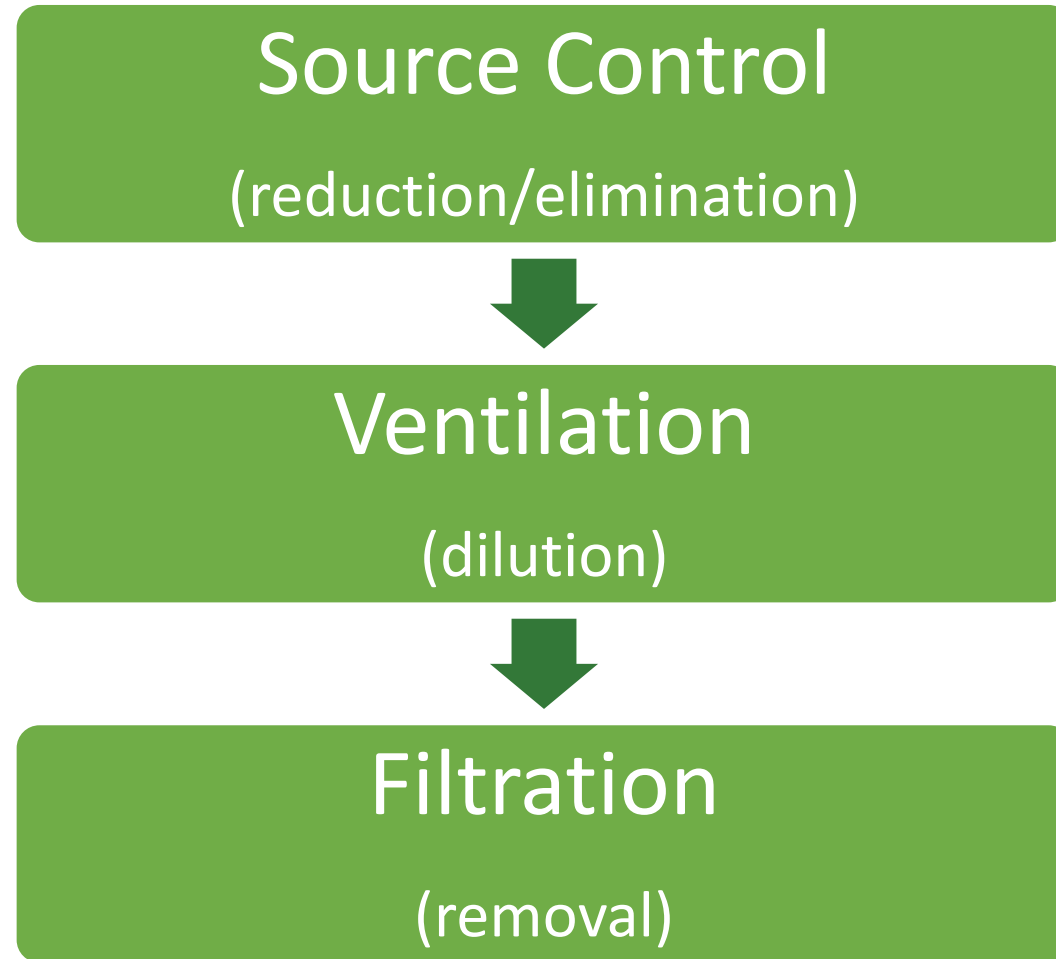
- Radon
- Pests
- Materials
- HVAC +
- Moisture +
- CO +

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- 1. Better durability**
- 2. Less long-term maintenance**
- 3. Comprehensive indoor air quality protection**
- 4. A safer, healthier home**

# Strategy for Creating a Safer Home by Reducing Health Risks From Poor IAQ




Indoor Air Quality (IAQ)

# Indoor airPLUS Revision 4 Introduction & Checklist



**Indoor airPLUS Version 1 (Rev. 04)  
Verification Checklist**



Home Address:		City:	State:	Zip:	
Climate Zone (1-4):		Radon Zone (1-3):			
Section	Requirements (Refer to full Indoor airPLUS Construction Specifications for details)	Must Correct	Builder Verified	Rater Verified	N/A
ENERGY STAR V3	Note: The Rev. 04 checklist reflects only the additional Indoor airPLUS requirements and their corresponding section numbers that must be met after completing the ENERGY STAR requirements. ENERGY STAR remains a prerequisite for Indoor airPLUS qualification.				
	ENERGY STAR Version 3 (or 3.1, 3.2) Program Requirements must be followed and the home shall be ENERGY STAR certified in conjunction with Indoor airPLUS qualification.	<input type="checkbox"/>		<input type="checkbox"/>	

Section	Requirements (Refer to full Indoor airPLUS Construction Specifications for details)	Must Correct	Builder Verified	Rater Verified	N/A
<b>Radon</b>	2.1 Radon-resistant features installed in Radon Zone 1 homes in accordance with Construction Specification 2.1.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Exception Applied: <input checked="" type="checkbox"/> Perimeter pipe loop in lieu of full aggregate (dry climate) <input type="checkbox"/> Manufactured home with raised pier foundation				

Section	Requirements (Refer to full Indoor airPLUS Construction Specifications for details)	Must Correct	Builder Verified	Rater Verified	N/A
Radon	2.1 Radon-resistant features installed in Radon Zone 1 homes in accordance with Construction Specification 2.1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Exception Applied: <input type="checkbox"/> Perimeter pipe loop in lieu of full aggregate (dry climate) <input type="checkbox"/> Manufactured home with raised pier foundation				
Pests	3.2 Corrosion-proof rodent/bird screens installed at all openings that cannot be fully sealed. (Not required for clothes dryer vents.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC Systems	4.1 Equipment selected to keep relative humidity < 60% in "Warm-Humid" climates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Exception Applied: <input type="checkbox"/> Climate zones 4-8, 3B, 3C and portions of 3A and 2B				
	4.2 Duct systems protected from construction debris AND no building cavities used as air supplies or returns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.3 No air-handling equipment or ductwork installed in garage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.6 Clothes dryers vented to the outdoors or plumbed to a drain according to manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combustion Pollutants	4.7 Central forced-air HVAC system(s) have minimum MERV 8 filter AND no ozone generators in home. Temporary filter installed to protect unit from construction dust.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Emissions standards met for fuel-burning and space-heating appliances.				
	5.1 Identify appliance type: <input type="checkbox"/> Masonry heater <input type="checkbox"/> Factory-built wood-burning fireplace <input type="checkbox"/> Wood stove <input type="checkbox"/> Pellet stove <input type="checkbox"/> Natural gas/propane fireplace				
	Appliance model name/number				
	5.2 CO alarms installed in each sleeping zone (e.g., common hallway) according to NFPA 720.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3 Multifamily buildings: Smoking restrictions implemented AND ETS transfer pathways minimized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Attached Garages	Attached garages: Door closer installed on all connecting doors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.4 Attached garages: In homes with exhaust-only whole-house ventilation EITHER <input type="checkbox"/> 70 cfm exhaust fan installed in garage OR <input type="checkbox"/> Pressure test conducted to verify the effectiveness of the garage-to-house air barrier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Radon Example:

- Passive system required in Radon Zone 1.
- 4" aggregate under slab . . .
  - Except in dry climates when a perimeter pipe loop is used.

# What Does Indoor airPLUS Cost?

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- No fee to participate in the EPA program.
- Raters may charge a verification fee.
- Cost of additional Indoor airPLUS features will vary based on:
  - Local code requirements and typical building practices
  - Type of foundation (e.g., below grade foundation or slab on grade)
  - Climate Zone (e.g., some exceptions in dry climates)
  - Radon Zone (passive system required in Radon Zone 1)
  - Availability of suppliers and cost of materials
- Cost of additional features could be a few hundred dollars in dry, non-Radon Zone 1 areas or up to a few thousand dollars in moist climates in Radon Zone 1.



# Indoor airPLUS as a Health Benchmark for High-Performance Homes

- IAP is respected as a benchmark for IAQ to protect occupant health in new homes.
- IAP is required by other labeling programs (Zero Energy Ready, PHIUS) as a pre-requisite.
- IAP is also referenced by LEED for Homes and the National Green Building Standard.





# What About Existing Homes?

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- Indoor airPLUS qualification is not available for existing homes except in the case of gut rehabs (if all ENERGY STAR requirements and Indoor airPLUS requirements are met).
- For most renovation and energy upgrade work, see EPA's [Healthy Indoor Environment Protocols for Home Energy Upgrades](#).
- Renovating multifamily buildings? See [Energy Savings Plus Health: Multifamily Building Upgrades](#).

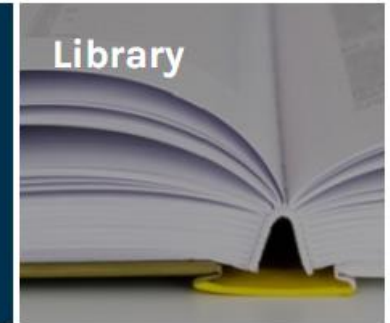
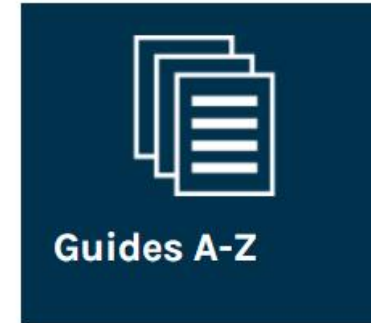
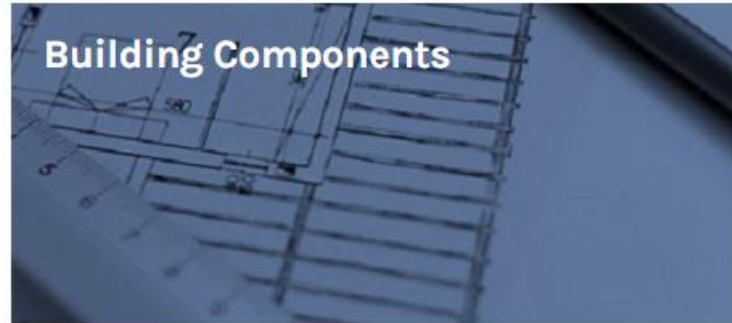
More info at: <https://www.epa.gov/indoor-air-quality-iaq/protect-indoor-air-quality-your-home>



# Technical Assistance

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- Specifications
- Webinars
- Online Resources and Tools
- Integration with DOE Building America Solution Center





# Resources and Tools

- Partner logos
- Co-brandable brochures
- Partner locator
- Website widgets
- 100% Commitment

**Committed to Building  
100% Indoor airPLUS**



**ASK ABOUT  
Indoor airPLUS  
QUALIFIED HOMES**



Sales and Marketing Resources: <https://www.epa.gov/indoorairplus/indoor-airplus-sales-and-marketing-resources>.

Partner logos and co-brandable resources in your [My ENERGY STAR Account \(MESA\)](#).



# 2018 Indoor airPLUS Leader Award Winner



## FULTON HOMES

*You're Proud To Own, We're Proud To Build!*





# 2018 Indoor airPLUS Leader of the Year



## FULTON HOMES

*You're Proud To Own, We're Proud To Build!*



ENERGY INSPECTORS®

- *All 2019 Award Winners to be announced in August.*
- *Leaders of the Year Announced during Award Ceremony at:  
[EEBA Summit – Oct 1-3 – Denver, CO](#)*

[www.epa.gov/indoorairplus/indoor-airplus-leader-award-winners](http://www.epa.gov/indoorairplus/indoor-airplus-leader-award-winners)