

## **ENERGY STAR Qualified Homes** Indoor Air Quality Checklist

Home Address: City: State:						
System	Inspection Guidelines				Verifier Approved	N/A
Ventilation						
1. Whole- Building Delivered Ventilation <sup>2</sup>	1.1 Ventilation rate meets requirements of ASHRAE Std. 62.2 2007, Section 4.4 <sup>1</sup>					
	1.2 In Hot-Humid climates, net exhaust flow $\leq$ 7.5 CFM per 100 sq. ft.					
	1.3 In Very Cold climates, net supply flow ≤ 7.5 CFM per 100 sq. ft.					
2. Local Mechanical Exhaust	System installed in each kitchen and bathroom and meets one of the following airflow standards:					
	Location	Continuous rate:	Intermittent rate: 3			
	2.1 Kitchen	≥ 5 ACH, based on kitchen volume <sup>4</sup>	≥ 100 CFM			
	2.2 Bathroom	≥ 20 CFM	≥ 50 CFM			
	2.3 If fans share common exhaust duct, back-draft dampers installed					
	2.4 Common exhaust duct not shared by fans in separate dwellings					
	2.5 Total net exhaust flow of two largest exhaust fans (excluding summer cooling fans) is $\leq$ 15 CFM / 100 sq. ft. of occupiable space when at full capacity <sup>5</sup>					
	2.6 Clothes dryers exhaust vented directly to outdoors <sup>6</sup>					
3. Fan Sound Ratings <sup>7</sup>	3.1 Continuous fans rated at $\leq$ 1 sone at minimum rated flow rate					
	3.2 Intermittent fans rated at $\leq$ 3 sone, unless maximum rated flow rate $\geq$ 400 CFM					
4. Controls	4.1 Continuously-operating ventilation system and mechanical exhaust fans designed to operate without occupant intervention during all occupiable hours					
	4.2 Readily accessible override controls provided to occupant for continuously- operating ventilation system and mechanical exhaust fans					
	4.3 If present, intermittently-operating ventilation system designed to automatically operate at least one hour out of every twelve					
	4.4 Controls labeled, unless function is obvious (e.g., bathroom exhaust fan)					
5. Air Inlets & Ventilation Source	5.1 Air inlets located $\geq$ 10 ft. from stack, vent, exhaust hood, or vehicle exhaust and $\geq$ 3 ft. from dryer exhaust					
	5.2 Air inlets unable to be obstructed by snow, plantings, or other material					
	5.3 Air inlets provided with mesh rodent / insect screen with openings ≤ 0.5"					
	5.4 Ventilation air comes directly from outdoors and not from adjacent dwelling units, garages, unconditioned crawlspaces, or attics					
Combustion Pollutants						
6. Garage Isolation	6.1 Air-handler and return ducts <u>not</u> located within the garage					
	6.2 Garage doors adjacent to occupiable spaces gasketed or made airtight					
7. Appliances and Detectors	7.1 No ventless combustion appliances installed, except for kitchen cooking devices					
	7.2 One carbon monoxide detector, certified by CSA 6.19-01 or UL 2034, installed in central location near sleeping areas for homes with combustion appliances or attached garage <sup>8</sup>					
Filtration						
8. HVAC Filter	8.1 ≥ 6 MERV filte	er installed in ducted mechanical systems	S <sup>9</sup>			
	8.2 Filter located so that return and ventilation air pass through prior to conditioning					
	8.3 Filter accessible for maintenance by owner					
	8.4 Filter rack fitted with flexible, air-tight gasketing on the surface that contacts the downstream side of the filter, or equivalent method					
	8.5 Filter held firmly in place by friction-fit spring clips in the filter rack, installed on the upstream side of the filter, or equivalent method					

- For proper procedures, exceptions, selection methods, and alternate methods to the following checklist, see the ASHRAE Standard 62.2 - 2007. All components shall be designed and installed per manufacturers' requirements and local codes.
- 2. The system shall have at least one supply or exhaust fan with associated ducts and controls. Local exhaust fans are allowed to be part of an exhaust ventilation system. Outdoor air ducts connected to the return side of an air handler are allowed to be part of a supply ventilation system if manufacturers' requirements for return air temperature are met. The airflow required by this standard refers to the delivered airflow of the system as installed and tested using a flow hood, flow grid, or other airflow measuring device.
- 3. An intermittent mechanical exhaust system shall be designed to operate as needed by the occupant. Control devices shall not impede occupant control in intermittent systems.
- 4. A vented range hood, or appliance-range hood combination, is required if exhaust fan flow rate is < 5 kitchen ACH.
- 5. If net exhaust flow exceeds allowable limit, net exhaust flow shall be reduced or compensating outdoor airflow provided. Net exhaust flow requirement is exempted if no atmospherically vented combustion or solid-fuel burning appliances are located inside the pressure boundary.
- 6. Electric condensing dryers equipped with condensate drain need not be vented.
- 7. Fans exempted from this requirement include HVAC air handlers and remote-mounted fans (i.e., fans outside habitable spaces and with ≥ 4 ft. ductwork between fan and intake grills).
- Carbon monoxide detectors shall be placed according to NFPA 720 and be hard-wired with a battery back-up function.
- 9. Manufacturer filter media boxes designed to accomplish these purposes meet these requirements.