

City of Chattanooga Residential Energy Code Compliance Certificate

HOUSE ADDRESS: _____

BUILDER/DESIGN PROFESSIONAL NAME: _____

COMPANY: _____ PHONE: _____

EMAIL: _____

ENVELOPE SUMMARY *(To be completed by Builder or Design Professional.)*

FLAT CEILING/ATTIC	_____ R-VALUE	WINDOWS:	_____ SHGC	_____ U-FACTOR
SLOPED/VAULTED CEILING	_____ R-VALUE			
ATTIC KNEEWALL	_____ R-VALUE			
EXTERIOR WALL	_____ R-VALUE	SKYLIGHT:	_____ SHGC	_____ U-FACTOR
ABOVE GRADE MASS WALL	_____ R-VALUE			
BASEMENT STUD WALL	_____ R-VALUE			
BASEMENT (CONTINUOUS)	_____ R-VALUE	OPAQUE DOOR (<50% Glazed):	_____ SHGC	_____ U-FACTOR
CRAWLSPACE STUD WALL	_____ R-VALUE			
CRAWLSPACE (CONTINUOUS)	_____ R-VALUE			
FLOOR	_____ R-VALUE	OTHER INSULATION COMMENTS:	_____	
CANTILEVERED FLOOR	_____ R-VALUE			
FOUNDATION SLAB	_____ R-VALUE			

MECHANICAL SUMMARY *(To be completed by HVAC Contractor.)*

NUMBER OF HEATING AND COOLING SYSTEMS: _____

HEATING SYSTEM 1 TYPE (choose one) GAS: _____ AFUE AIR-SOURCE HEAT PUMP: _____ HSPF OTHER

COOLING SYSTEM 1 TYPE (Standard DX, Heat Pump, Geothermal, Etc.) _____

COOLING SYSTEM 1 EFFICIENCY: _____ SEER EER OTHER

HEATING SYSTEM 2 TYPE (choose one) GAS: _____ AFUE AIR-SOURCE HEAT PUMP: _____ HSPF OTHER

COOLING SYSTEM 2 TYPE (Standard DX, Heat Pump, Geothermal, Etc.) _____

COOLING SYSTEM 2 EFFICIENCY: _____ SEER EER OTHER

WATER HEATER ENERGY FACTOR: _____ Ef FUEL TYPE: GAS ELEC OTHER

FIELD TESTING *(To be completed by a qualified Third-Party Verifier)*

BUILDING ENVELOPE TIGHTNESS:

FAN FLOW AT 50 PASCALS: _____ CFM₅₀ TOTAL CONDITIONED VOLUME: _____ ft³

ACH₅₀ = CFM₅₀ x 60 / Volume = _____ ACH₅₀ *(must be less than 7 ACH₅₀)*

DUCT TIGHTNESS TESTING:

SYSTEM	METHOD* (PCO, PCT, RIT)	CFM ₂₅	AREA SERVED (ft ²)	TEST RESULTS**	COMMENTS
1					
2					

* **PCO** (Post Construction Leakage to Outdoors) 8% max; **PCT** (Post Construction Total Leakage) 12% max; **RIT** (Rough-in w/Air Handler installed) 6% max

** CFM₂₅ per 100 ft² of Conditioned Floor Area = CFM₂₅ x 100 / Conditioned Floor Area Served

BUILDING ENVELOPE TIGHTNESS / DUCT TIGHTNESS TEST CONDUCTED BY:

NAME: _____ SIGNATURE: _____

COMPANY: _____ QUALIFICATION: HERS BPI DET

City of Chattanooga Residential Energy Code Air Barrier and Insulation Checklist

COMPONENT	CRITERIA	Must Correct	Verified	N/A
Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Breaks or joints in the air barrier are filled or repaired.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Air-permeable insulation is not used as sealing material.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Air-permeable insulation is inside of an air barrier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Attic access (except unvented attic), knee wall door, or drop down stair is sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walls	Corners and headers are insulated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Junction of foundation and sill plate is sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windows and doors	Space between window/door jambs and framing is sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rim joists	Rim joists are insulated and include an air barrier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floors (including above-garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Air barrier is installed at any exposed edge of insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crawl space walls	Insulation is permanently attached to walls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage separation	Air sealing is provided between the garage and conditioned spaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recessed lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall. Exception—fixtures in conditioned space.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing and wiring	Insulation is placed between outside and pipes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical/phone box on exterior wall	Air barrier extends behind boxes or air sealed-type boxes are installed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Common wall	Air barrier is installed in common wall between dwelling units.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fireplace	Fireplace walls include an air barrier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AIR BARRIER AND INSULATION INSPECTION CONDUCTED BY:

NAME: _____ DATE: _____

SIGNATURE: _____ PHONE: _____