



City of Chattanooga

LAND DEVELOPMENT OFFICE
1250 Market Street, Suite 1000
Chattanooga, TN 37402-2713

Gary B. Hilbert, A.I.A.
Director

Ron Littlefield
Mayor

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The City of Chattanooga has adopted the 2009 International Energy Conservation Code. This code regulates the minimum energy conservation requirements for new buildings, both commercial and residential. Listed below are some changes from the 2006 IECC for residential construction.

1. A Duct Tightness Test (duct blaster) and Air Sealing Test (blower door) shall be done by a third party verifier
2. A visual air sealing inspection shall be conducted by the general contractor or their designee. The Air Barrier and insulation Checklist shall be present at final inspection.
3. The City of Chattanooga Residential Energy Code Compliance Certificate shall be completed and signed by a third party verifier. The certificate shall be posted next to the electrical distribution panel prior to final inspection.
4. A Third Party Verifier is an approved independent person or firm responsible for conducting testing to verify a project's compliance with the 2009 IECC. The verifier shall not be an employee of the general contractor or the HVAC contractor.
5. Attic knee walls shall have R-19 batts (6" walls) or insulation form board and insulation batts that equal R-18 (R-5 foam board + R-13 batts). Foam board may have to be protected by section 316 of the 2012 IRC.

City of Chattanooga Residential Energy Code Compliance Certificate

HOUSE ADDRESS: _____

BUILDER/DESIGN PROFESSIONAL NAME: _____

COMPANY: _____ PHONE: _____

EMAIL: _____

Permit Number: _____

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

FLAT CEILING/ATTIC	_____	R-VALUE
SLOPED/VAULTED CEILING	_____	R-VALUE
ATTIC KNEEWALL	_____	R-VALUE
EXTERIOR WALL	_____	R-VALUE
ABOVE GRADE MASS WALL	_____	R-VALUE
BASEMENT STUD WALL	_____	R-VALUE
BASEMENT (CONTINUOUS)	_____	R-VALUE
CRAWLSPACE STUD WALL	_____	R-VALUE
CRAWLSPACE (CONTINUOUS)	_____	R-VALUE
FLOOR	_____	R-VALUE
CANTILEVERED FLOOR	_____	R-VALUE
FOUNDATION SLAB	_____	R-VALUE

WINDOWS: _____ SHGC _____ U-FACTOR

SKYLIGHT: _____ SHGC _____ U-FACTOR

OPAQUE DOOR (<50% Glazed): _____ SHGC _____ U-FACTOR

OTHER INSULATION COMMENTS: _____

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: _____