

2012 IECC Residential Energy Code - Duct & Envelope Testing Results*

Address: _____

Builder/Designer: _____

Phone: _____

Envelope Summary: Building Envelope Tightness (BET)

BET test conducted by: _____ Phone: _____

Fan Flow at 50 Pascals = _____ CFM₅₀ Total Conditioned Volume = _____ ft³

ACH₅₀ = CFM₅₀ x 60 / Volume = _____ ACH₅₀ (must ≤ 3 ACH₅₀)

Visual Inspection Checklist (to be conducted by an approved entity or other third-party)

Visual Inspection Conducted by: _____ Phone: _____

AIR BARRIER AND INSULATION INSTALLATION

	COMPONENT	CRITERIA*
	Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
	Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.
	Walls	Corners and headers shall be insulated and the junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
	Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
	Rim joists	Rim joists shall be insulated and include the air barrier.
	Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
	Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
	Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
	Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
	Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
	Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the drywall.
	Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
	Shower/tub on exterior wall	Exterior walls adjacent to showers and tubs shall be insulated and the air barrier installed separating them from the showers and tubs.
	Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air sealed boxes shall be installed.
	HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.
	Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors.

Mechanical Summary: Duct Tightness Verification (DTV)

DTV Test Conducted by: _____ Phone: _____

Unless all ducts are located within conditioned space, must verify one of the following:

- Post-construction total duct leakage (PCT) is ≤ 4%
- Rough-in total duct leakage (RIT) with air handler installed is ≤ 4%
- Rough-in total duct leakage without air handler installed (RITnah) is ≤ 3%

% Duct Leakage Result = CFM₂₅ x 100 / Conditioned floor area served

System	Test (PCT, RIT, RITnah)	CFM ₂₅	Area served (ft ²)	Result (%)	Comments
1					
2					
3					

*Note: This document to be posted on or in the electrical distribution panel