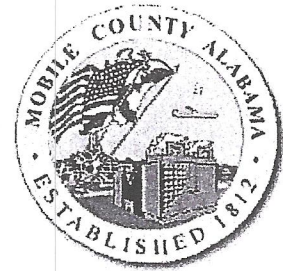


Mobile County Inspection Services

Duct & Building Air Leakage/Ventilation Testing & Compliance Certification Form



Date			
HVAC Contractor		HVAC Cert.#	
DET Verifier		DET Cert.#	
City		State	Zip
Phone		E-mail	

Home Owner		City	
Address		State	Zip
Builder/Contractor		Permit #	

Building Envelope Tightness Verification

Fan Flow @ 50 Pascals (CFM ₅₀)	Total Conditioned Volume	*ACH ₅₀	Code Compliant

* IECC R402.4.1.2 (Modified for Zones 2 and 3) The building or dwelling unit shall have an air leakage rate not exceeding 5 air changes per hour (@ 50 pascals).

Duct Tightness Verification

System	*Test	*Max. % Leakage	CFM ₂₅	Floor Area (ft ²)	% Leakage	Code Compliant
1						
2						
3						
4						

Exception - No test is required where the ducts and air handlers are located entirely within the building envelope.

NTR = No Test Required

Maximum % Leakage N/A

Maximum Leakage per 100 square feet of conditioned floor area. (IECC R403.3.4)

RITnah = Rough in total Leakage with no air handler or furnace installed

Maximum % Leakage 3%

RIT = Rough in total leakage with air handler or furnace installed

Maximum % Leakage 4%

PCT = Post construction total leakage with system complete

Maximum % Leakage 4%

PCO = Post construction total leakage to the outside with system complete

Maximum % Leakage 4%

Continuous Whole House Ventilation Requirement

*Intermittent Rate Factor

Floor Area	Bedrooms	Continuous Ventilation Required (CFM)	Run-Time %	Factor
Ventilation Method			Measured CFM	

* IRC M1507.3.3 Mechanical ventilation rate. The whole-house mechanical ventilation system shall provide outdoor air to each habitable space at a continuous rate of not less than that determined in accordance with Table M1507.3.3(1).

Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25 percent of each 4-hour segment and the "Continuous Ventilation Required (CFM)" is multiplied by the "Factor".

I certify that I have inspected the duct work associated with the HVAC unit referenced by the permit listed above (if applicable and where required) and found it complies with the requirements of chapter 305-2-4 of the Administrative Code of Alabama, known as the Alabama Energy and Residential Code.

Contractor Signature _____

Date _____

Formulas and Tables

Building Envelope Tightness Verification

$$ACH_{50} = (CFM_{50} \times 60) / \text{House Volume}$$

Duct Tightness Verification

$$\% \text{ Duct Leakage} = (\text{Total CFM}_{25} / \text{Floor Area Served}) \times 100$$

Continuous Whole House Ventilation Requirement

Reproduced From Table M1507.3.3 (1) in the 2015 IRC					
Continuous Whole - House Mechanical Ventilation System Airflow Rate Requirements					
Dwelling Unit Floor Area (square feet)	Number of Bedrooms				
	0 - 1	2 - 3	4 - 5	6 - 7	> 7
	Airflow in CFM				
> 1,500	30	45	60	75	90
1,501 - 3,000	45	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

Reproduced From Table M1507.3.3 (2) in the 2015 IRC						
Intermittent Whole - House Mechanical Ventilation Factors ^{a,b}						
Run Time Percentage In Each 4 - Hour Segment	25%	33%	50%	66%	75%	100%
Factor ^a	4	3	2	1.5	1.3	1

a. For ventilation system run time values between those given, the factors are permitted to be determined by interpolation.

b. Extrapolation beyond the table is prohibited.

Ventilation Methods

Supply Only

Outside Air Provided By Dedicated Fan

Supply Only

Outside Air Duct to Return Air

Balanced

Outside Air Duct to Return Air w/Interlocked Exhaust Fan

Balanced

Supply and Exhaust Fans

Balanced

Energy Recovery Ventilator (ERV)

Balanced

Ventilating Dehumidifier