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

Floor Area	Bedrooms	Continuous Ventilation Required (CFM)
Ventilation Method		

*Intermittent Rate Factor

Run-Time %	Factor
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 Syste 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 Facts[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