Home Audit Report

Basic Information | **Home Facts** | Recommendations

Testing results

Conditioned volume (incl. basements)	30640	cubic feet
Air leakage rate at CFM50 test pressure	1690	cfm at CFM50 Pascal's
Air leakage rate at normal conditions	114	cfm (Cubic feet per minute)

454 Basketballs of air you have heated or cooled are pushing out of your home every minute, 24/7!! SO, the same volume of outside air is being sucked into your house from lower points of leakage in the home – you now have to heat or cool this unconditioned outside air continuously!!

Air changes per hour at natural pressure	0.22	or/ 3.31	ACH@CFM50
Combustion Appliance Zone (CAZ) limit	-2.0	Maximum safe pressure difference	
CAZ worst case pressure difference	-1.1	With all exhaust fans running	
Is worst case CAZ within BPI limits?	PASS		
Do furnace gases draft out safely?	PASS		
Do water heater gases draft out safely?	**FAIL**		
Any gas pipe leaks detected?	**1 leak identified**		

Combustion Appliance Test Results - As measured under worst case conditions

	Water Heater1	Water Heater2	Furnace 1	Furnace 2
Backdrafting / Spillage -	FAIL		PASS	
Stack Temperature -	455		90+%	
Carbon Monoxide / CO in ppm -	1		direct	
Stack Draft Pressure in PA -	-0.6		vent	
Efficiency (% of Rated value) -	0.81			

CO Instructions re: Retrofit work

26-100	Recommend service call
100-400	or Spills at natural = Must be serviced
> 400	& No spillage = Must be serviced
> 400	and spillage = EMERGENCY
	Shut off fuel to appliance and have
	owner call for service immediately

Indoor Air Quality

To ensure the health safety of a home's occupants, ASHRAE (the American Society of Heating, Refrigerating, and Air-Conditioning Engineers) publishes acceptable standards for the indoor air quality of a home. This standard formulates the minimum direct Mechanical Ventilation Rate (MVR) cfm requirement of fresh air to be continuously introduced into residential homes. Since 1989 the Building Performance Institute (BPI) has endorsed this standard for all homes. While the standard has been updated in 2016 to include some measure of constant mechanical ventilation for all homes improving home efficiency, many existing homes air leakage credit may reduce that requirment to zero.
See the addendum titled "Residential Indoor Air Quality" for a complete discussion.

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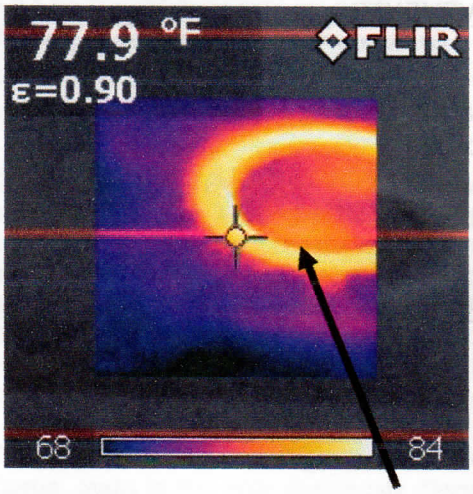
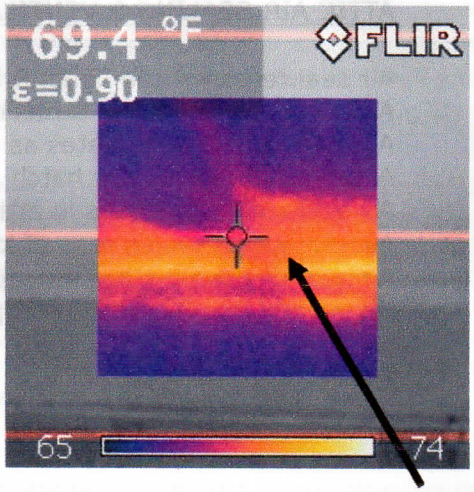
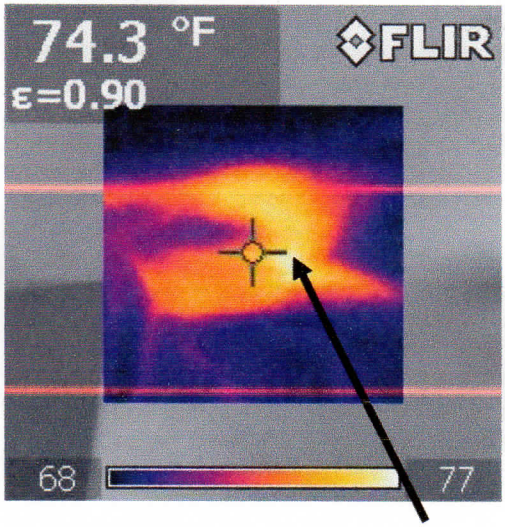
Audit photos / Unique situations



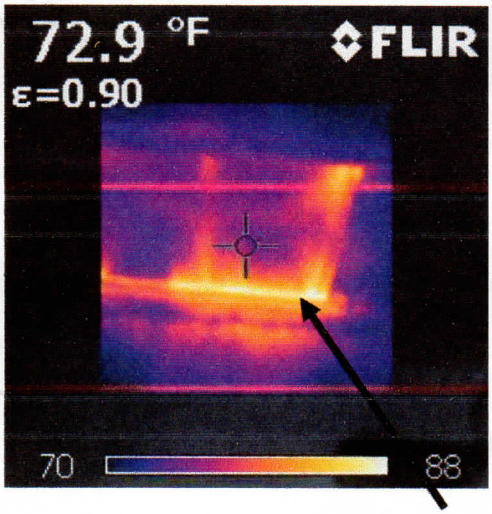
Attic air leakage through can lights. Housing in attic should be covered and air sealed.



Extensive air leakage was noted at the exterior top plates which need to be air sealed.



Missing insulation was noted in the attic which will also cause warm interior air to mix with cold attic air.
R-49 cellulose insulation recommended.



Attic air leakage through attic hatch. Trim should be caulked and hatch should be insulated and weatherstripped as required.