

# HVAC Contractors: Survive and prosper in hard times

The International Energy Conservation Code (IECC 2009 and 2012) requires HVAC ducts to be tested to prove a minimum leakage. While many states and localities will adopt this code outright, it is likely that many will also amend it to allow inspection and sealing alternatives. Many HVAC contractors are bound to breathe a sigh of relief at not having to face potential failure and the subsequent looking for the 'leak in the trunk line' that will eat up their profit margins by the minute.

Except is it really potential lost revenue? Isn't it really a potential lost opportunity? This type of thinking completely obscures one of the greatest opportunities that HVAC companies have had in decades.

By and large, differences between HVAC hardware are small. Selling one grey metal box over another is difficult and often ends up in a price war where the lower bidder gets the job because none of the contractors succeeded in differentiating themselves from their competitor. So, here is the new opportunity.

Over the years the EPA and many state agencies have upped the stakes, requiring restrictive installation procedures, time consuming testing and annoying inspections. State contractor organizations in Michigan and Washington have sued to "stop the insanity". Many contractors offer discounts when the homeowner is willing to have new equipment installed without a permit. As few as 15% of these jobs are code compliant.

At the same time and for the past 15 years the top selling, most profitable contractors nationwide have not only embraced these new measures but have taken them many steps farther. Look at ACCA and Contracting Business contractors of the year and notice the range of services they provide and often include blower door, duct testers and flow hoods. So, what gives?



**Duct Testing adds value to your installations**



**Testing can identify dangerous back-drafting**

Well, first of all, a typical new HVAC duct system mounted in the attic or crawl space according to the EPA *"in typical houses, about 20% of the air that moves through the duct system is lost due to leaks, holes and poorly connected ducts. The result is higher utility bills and difficulty keeping the house comfortable, no matter how the thermostat is set"*. An additional percentage is lost due to the low insulation levels installed on ducts. If your competitor could convince the homeowner that their company would ensure those losses were minimized, what chance do you think you'd have to get the job? NO matter HOW low you bid.

Next, these leaking duct systems cause pressure imbalances in the house that can cause dangerous back-drafting of a gas hot water heater, furnaces and fireplaces and can pull in nasty stuff from your garage or musty crawlspace. When your competitor demonstrates these problems to the homeowner because they have the instrumentation to measure and prevent those conditions, they get the job.

Next, when your customer finds out that Codes were designed to solve these problems and your customer winds up with much higher energy costs, discomfort and an unsafe house, how likely is it that those customers would give you a referral? Initially they were concerned about price but now the tables have turned and your reputation is on the line but this could have been prevented if you presented the benefits of doing the job right in the first place. Once the customers see a demonstration that identifies

these problems they ask “can you fix this?”. Showing your customers that you do the job right is an easier sale than selling purely on price.

Well, that’s what a few leaders are doing out there. Called Performance Contractors, they are selling systems that outperform their competitors in every way. Their customers get a better deal and so does the HVAC contractor. They sell a bigger job and get a more satisfied customer which turns into more referrals.

What about new home installations where the low bid gets the job? In states that allow inspections without a duct leakage test, the time and cost could be greater than simply testing the ducts.

It is actually faster to test the duct system after installation than it is to have the building official inspect it carefully. That is exactly what Code Officials think when an inspection is requested; they say “just show me the test results because I don’t want to climb around the attic and inspect all the joints. And what about just using mastic without testing as some states allow? Well, even if you do this, there is still a chance you’ll miss some connections and who needs a call back to fix it. You should be using mastic anyway to prevent the duct system from leaking and to begin falling apart in 5 years. Once contractors get used to testing their ducts as they build the system, they can save time over mastic and inspection options.



**Testing while installing ducts saves time**



**Blower doors will identify problems and help sell the complete solution**

For existing system change-outs, using a blower door will quickly identify how leaky the duct work has been. Using a duct tester is too slow. Instead of installing a larger system to compensate, in many cases a much smaller system will do the job much better after sealing or replacing the ductwork. This one step will differentiate the superior job you’ll then be able to promise and deliver on. Using a duct leakage measurement system after installation will ensure you did the job right and can actually save you time because it will pinpoint problem areas that would be hard to locate visually. Your liability will also be reduced because the new system is much less likely to cause pressure imbalances in the house which will cause gas hot water heaters and furnaces and fireplaces to backdraft. You can also stress duct insulation and combustion safety checks.

For new installations, your duct tester and possibly a blower door with some artificial smoke will quickly identify leaks in the ductwork so you’ll know when you’ve got it done right. Just like a plumber will pressure test a house’s plumbing, HVAC installers really need to pressure test the ducts in the same way.

How hard is it to meet the new duct leakage Code requirements? Most contractors find they can get system leakage down to less than half of the Code requirement and after their second installation in about the same amount of time they are taking now.

The Code requirements are coming anyway, jump onto this new performance wave and sell higher quality systems. It is much easier than selling the old way on just price.