Report

Contractor Pricing Strategies for Air Sealing Attics in Existing Homes

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Introduction

Across the country, contractors who are interested in expanding their business into residential air sealing are often worried about how to price jobs so they can make a profit. Often these jobs are focused on the attic and are combined with an initial audit and blown attic insulation. Practiced home performance contractors have developed a variety of pricing strategies based on their experience in the business, understanding of product costs, and knowledge of the residential marketplace they serve.

At the core, these various pricing methods are very similar – estimate direct costs (labor, materials, transportation) and mark-up appropriately to cover a percentage of indirect costs (office space, equipment maintenance, marketing, etc.) and profit margin. There are, however, a variety of ways to incorporate these basic job cost estimation principles into a mechanism for developing price proposals. In general, having a simple pricing strategy enables a contractor to provide the customer with a reliable on-site price estimate that saves the time and effort it would take to develop this proposal in the office. This not only gives the customer all the information they need about the job, but can also lead to more success selling a job quickly.

This document discusses a few examples of estimating strategies used by various contractors for pricing air sealing and insulation work. Several contractors across the country were interviewed about their services and pricing for a typical attic retrofit and the information presented here reflects the range of their responses with regard to pricing the air sealing component of their services. Please note, however, that specific pricing across regional markets will vary due to differences in material costs, labor rates and other factors.

Selling Air Sealing

The most significant difference in how air sealing contractors price their services is whether they use a comprehensive (advanced) energy audit with diagnostic tests resulting in a detailed written report; a simple, no-cost/low-cost visual evaluation with a very minimal report; or something in between. Typically, contractors that are going beyond providing blower door diagnostics and a report are focused on selling additional services beyond air sealing and insulation or a basic “attic retrofit”. These additional services could include duct sealing, duct replacement, wall insulation, sealed crawlspaces, and other envelope driven improvements. Contractors delivering a comprehensive home assessment likely provide additional services beyond envelope improvements and/or subcontract work to HVAC companies or other trade contractors.

Type of Audit	Delivery Methodology	Typical Price Charged
Basic	Visual inspection	Free, final price covers costs
Diagnostic	Blower door, visual inspection	$50 to $200
Advanced Diagnostic	Blower door, duct blaster, IR analysis, detailed report	$200 to $400
Comprehensive Home Assessment	Blower door, duct blaster, IR analysis, HVAC EQ evaluation, health and safety tests, baseload analysis, and detailed report	$400.00 or more
Note: Contractors typically charge a higher audit fee to cover travel time when customers are outside their core service area.		

Some contractors use a typical “old school” approach with the basic audit or “free estimate”. This allows the contractor to reduce their level of effort in the sales process by delivering shorter audits. Diagnostics are delivered as part of their sold services (e.g. blower door test and combustion safety testing). However, these contractors typically have significantly lower closing rates than contractors delivering more comprehensive audits and aren’t differentiating themselves from competition through the use of diagnostic tools. Therefore, contractors using the basic audit must deliver significantly more audits to achieve their desired number of sales. Ultimately, the contractor will spend more time traveling to potential customer’s homes instead using that time educating and building relationships with their potential customers.

Other contractors charge a small fee ($50 - $200) for their visual inspection but include blower door diagnostics. Contractors may provide a report at this level of audit in the form of a simple checklist, which facilitates the contractor to customer discussion of findings with the customer. This small fee does help screen out less serious customers and helps to cover travel costs.

Many contractors employ testing equipment (blower door, IR camera, and combustion safety testing equipment) as standard on their audits and charge a fee in the $200 to $400 range to cover the costs of traveling to the customer’s home, conducting an advanced diagnostic audit, and generating a detailed report of the home. At the low end of this fee scale, the fee may still not make the audit a revenue generator but may cover a significant portion of contractor costs to deliver the audit.

At the high end, whole house contractor’s price for a comprehensive home assessment can run up to $500 or more when additional testing and analysis such as an infra-red camera, HVAC system evaluation, health and safety, and base load analysis is also performed. Of course, the higher fee does allow the contractor to cover costs and the opportunity to educate the homeowner about their home providing a better opportunity to make a whole-house sale.

Charging more will scare away some potential customers, since many people are not willing to pay that much to receive information on saving energy and making their home more comfortable and safe. On the other hand, the sales close rate can be expected to go up, since customers who are willing to pay for the audit are more likely motivated to do work, especially when they see the sophistication, knowledge and technical capabilities demonstrated during a comprehensive home audit. If the contractor provides them with a good understanding of their home’s problems, how he will address them and how he will re-inspect the home to ensure peace of mind, they will be more likely to sign a contract. Many home performance contractors find they complete scopes of work for over 50 percent of the homes they evaluate in this fashion. In addition, many contractors do employ some sort of discount on audits during slow periods or for warm (e.g. referral) leads.

Some contractors will offer all levels of audit through a tiered approach that allows the customer to select the amount of information they want to receive about their home. The contractor can conduct a no- or low-cost visual audit to identify major problems in the home or on the high end deliver a comprehensive home assessment that will allow them to learn more about how the systems in the house are working. At the highest price level, the contractor can perform a visual inspection, both diagnostic tests and perhaps also use an infra-red camera to provide the homeowner with a highly comprehensive evaluation.

Pricing Air Sealing

Through years of experience, some contractors have developed a sixth sense that tells them how much to price air sealing services based on what they observe in the individual home. However, developing a sixth sense takes time and practice.

Familiarity with the different housing styles in their service territory also helps contractors identify problem areas and price their work. Cape Cod style homes, for example, typically require different scopes of air sealing work than do colonials. These contractors, after a visual inspection and diagnostic testing, know generally what to charge to cover costs and earn profit on a job. It may be that they know, on average, how much they should earn from a typical house and adjust their price quote up or down depending on the expected level of effort for the individual house they are servicing.

Similarly, some contractors inspect a house and calculate an estimate by breaking out how many hours and what materials it will take to complete the job – and then include some degree of mark-up to cover overhead expenses and add to profit. In many cases, labor, materials and mark-up are included in a single hourly or per-day rate that contractors can use for estimation purposes.

A number of contractors use more precise formulas to determine the price for air sealing jobs. Some employ performance-based methods, such as pricing services based on air infiltration improvements in a home. With this strategy, contractors measure air infiltration during the audit and estimate a price based on a target infiltration rate. After the work is completed they charge based on the post infiltration rate but not to exceed their estimated price. In most cases the performance based pricing is done on a rather conservative basis and by very experienced air sealing contractors. Other contractors develop a quote based on the length of the top plate or the total square footage of the attic floor.

Estimation Technique	Process used	Rate charged in review
Per CFM50	$ per 1 CFM50 reduction	$0.35 to $.50
Per foot of top plate	$ per linear foot of top plate	$1.50 to $2.00
Per Sq. ft.	$ per square foot of attic floor	$0.25 to $0.35
Per man hour	$ per man hour of work (usually 8-16)	$50.00 to $200.00
Flat rate	$ per house	$750.00 to $2000.00
Note: Lower rate schedules tended to add in specific charges for materials used while higher rates tended to roll all charges into one fee.		

Performing air sealing in a home is labor intensive, but typically requires few materials. Most contractors spend between $100 and $350 on materials for a house. Labor costs are a slightly greater expense. The actual wage rate for employees usually ranges from $15 to $25 per hour based on experience and standard jobs often require 8 to 16 man hours, so a contractor can expect to spend between $200 and $400 (unloaded) on labor based on the size of the job.

Contractors typically experience a relatively high profit margin on their retrofit air sealing work, as they do on other measures that relate to the home's envelope (i.e., insulation, windows, and doors). Unlike the new construction market, where fierce competition tends to drive prices down, the existing homes market provides contractors with the opportunity to demonstrate the additional value of high quality work. Successful contractors have reported profit margins of roughly 40 percent on retrofit jobs, versus closer to 10 percent for new construction.

Along with air sealing a home, contractors should always take the time to make certain that safety is not being compromised. After work is complete it is important to perform combustion safety testing and ensure that all combustion gases are venting out of the home envelope appropriately.

Recessed Cans

Many contractors charge separately for air sealing recessed can lights, although some do include this work in their hourly rate. This specific component of the attic retrofit is priced separately due to the labor required to build a covered box of non-combustible materials around recessed can lights. However, these boxes are very important for creating a continuous air and thermal barrier between conditioned space and the unconditioned attic. Across the contractors surveyed, the price for this service ranged from $50 to $100 per recessed can. If the can light is insulation contact (IC) rated, some contractors charge $10 for sealing it air-tight with a heat resistant caulk.

Attic Insulation

Strategies for pricing attic insulation jobs are more similar across the industry. For loose fill insulation, almost all contractors charge by the square foot – and this price will vary depending on the type and amount of material, whether labor is included or charged separately, and whether local supply and demand factors are impacting material costs. Prices, however, generally ranged between $0.75 and $1.20 per square foot including material, labor costs, and profit. Lower per square foot rates may charge separately for installing insulation baffles ($2.00 each). A few contractors charged a fee of $0.20 to $1.00 per square foot for insulation removal when old insulation has been damaged by moisture or is severely degraded. Contractors usually added between 6” and 12” of insulation in a typical job (a home with some attic insulation) and their prices per square foot were generally in the higher range for smaller jobs. It’s also necessary sometimes for contractors to charge additional costs for preparatory work in attics, such as building retaining walls around storage spaces and access pathways to keep them clear of insulation.

Other Services

Contractors can offer a number of services in addition to air sealing and insulation as part of their attic retrofit work. The most significant in terms of an additional revenue stream and homeowner benefit is duct sealing services.

- Duct sealing - A duct evaluation test during the home energy audit may reveal that the homeowner could significantly benefit from sealing their ducts. This service typically entails the use of mastic to seal portions of the duct system that are located in the attic and other accessible areas, or sealing the entire duct system with Aeroseal®.

- Radiant barriers – In hot sunny climates, the installation of radiant barriers (reflective insulation) can reduce cooling costs and improve homeowner comfort. One contractor charged $1.00 per square foot installed.

- Passive attic ventilation – When air sealing contractors should address attic ventilation deficiencies including adding additional passive roof vents and/or installing wind baffles to prevent wind intrusion into the attic insulation.

- Mechanical ventilation improvements – Many mechanical exhaust systems terminate improperly in attics or in unvented soffits. In order to protect the integrity of insulation, structural lumber and roof decking, these exhaust vents need to be redirected to vent directly out through properly installed roof or soffit vents. If the home is cooled during the summertime, such exhaust ducts should be insulated in order to prevent condensation and moisture damage that can result from it.

These services, in addition to air sealing and insulating the attic, can help raise the overall value of a job and further improve homeowner comfort and energy efficiency. Ultimately, pricing is done for the whole job, which is inclusive of all services being performed for the customer and the air sealing pricing strategy should be considered as one component of pricing a comprehensive job.